AV-14F13
AV-14F33

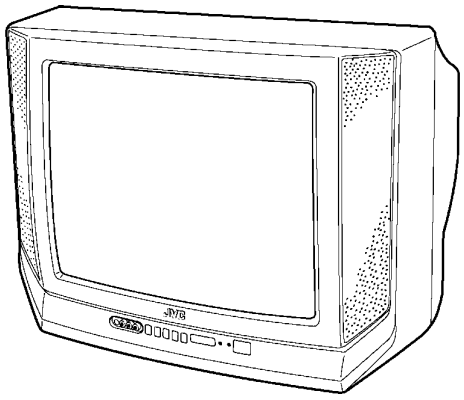
JVC

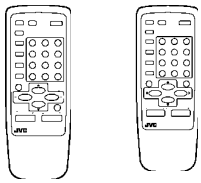
SERVICE MANUAL

COLOR TELEVISION

BASIC CHASSIS
GA2

AV-14F13/PH
AV-14F33/PH





RM-C372GY [AV-14F13/PH]

RM-C373GY [AV-14F33/PH]

CONTENTS

- ■ SPECIFICATIONS ····· 2
- ■ SAFETY PRECAUTIONS ····· 3
- ■ FEATURES ····· 4
- ■ MAIN DIFFERENCE LIST ····· 5
- ■ FUNCTIONS ····· 6
- ■ SPECIFIC SERVICE INSTRUCTIONS ····· 8
- ■ SERVICE ADJUSTMENTS ····· 15
- ■ PARTS LIST ····· 33
- ★ OPERATING INSTRUCTIONS
- ★ STANDARD CIRCUIT DIAGRAM (APPENDIX) ····· 2-1

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SPECIFICATIONS

Items		Contents	
		AV-14F13/PH	**AV-14F33/PH**
Dimensions (W × H × D)		462mm × 340.5mm × 375mm	←
Mass		10kg	←
TV RF System		CCIR (M)&(N)	←
Color / Sound System		NTSC / PAL-M / PAL-N	NTSC / PAL-M / PAL-N BTSC (Multi Channel Sound)
TV Receiving Channels and Frequency	**VL Band** **VH Band** **UHF Band**	(02～06) 54MHz～88MHz (07～13) 174MHz～216MHz (14～69) 470MHz～806MHz	←
CATV Receiving Channels and Frequency	**Low Band** **High Band** **Mid Band** **Super Band** **Hyper Band** **Ultra Band** **Sub Mid Band**	(02～06) (07～13) (14～22) (23～36) (37～64) (65～94, 100～125) (01, 96～99) (54MHz～804MHz)	←
TV/CATV Total Channel		181 Channels	←
Intermediate Frequency	**Video IF Carrier** **Sound IF Carrier**	45.75MHz 41.25MHz (4.5MHz)	←
Color Sub Carrier		NTSC : 3.579545MHz PAL-M : 3.57561149MHz PAL-N : 3.58205625MHz	←
Antenna terminal		75Ω (VHF/UHF) Terminal, F-Type Connector	←
Power Input	Rated Voltage Operating Voltage	110V～240V AC, 50Hz/60Hz 90V～260V AC, 50Hz/60Hz	←
Power Consumption		42W	44W
Picture Tube (measured diagonally)		Picture tube 36cm Visible aria 34cm	←
High Voltage		22.5kV±1.0kV (at zero beam current)	←
Speaker		5cm × 12cm Oval type × 2 (monaural)	5 × 12cm Oval type × 2 (stereo)
Audio Power Output		2W (monaural)	1.5W+1.5W (stereo)
Input	**Video input** **Audio input**	1Vp-p, 75Ω (RCA pin jack) 500mVrms (-4dBs), High impedance (RCA pin jack)	←
Output	**Video output** **Audio output**	1Vp-p, 75Ω 500mVrms (-4dBs), Low impedance	←
Headphone Jack		Stereo mini jack (dia. 3.5mm, Sound is Monaural)	Stereo mini jack (dia. 3.5mm, Sound is Stereo)
Remote Control Unit		RM-C372GY (AA/R6/UM-3 battery × 2)	RM-C373GY (AA/R6/UM-3 battery × 2)

Design & specifications are subject to change without notice.

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

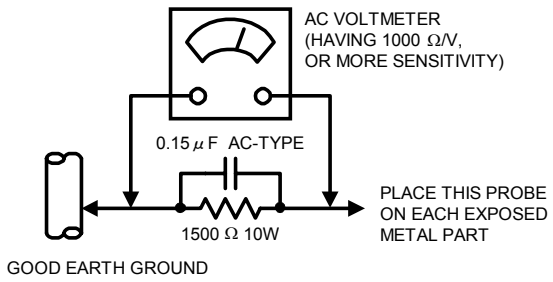
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



FEATURES

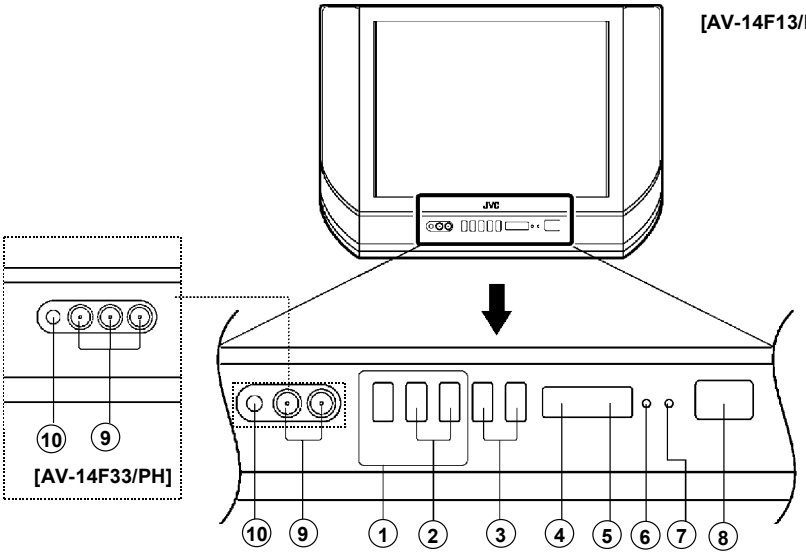
- New chassis design enables use of a main board with simplified circuitry.
- Provided with miniature tuner (TV/CATV).
- PLL synthesizer system TV/CATV totaling 181 channels.
- Multifunctional remote control permits picture adjustment.
- Adoption of the VIDEO STATUS function.
- Adoption of the ON/OFF TIMER function.
- With 75Ω V/U in common (F-Type) ANT Terminal.
- SLEEP TIMER for setting in real time.
- Wide range voltage (110V～240V) AC power input.
- With AUDIO / VIDEO INPUT & OUTPUT terminal.
- Closed-caption broadcast can be viewed.

MAIN DIFFERENCE LIST

⚠	Model Name / Part Name (Item)	AV-14F13/PH	AV-14F33/PH
	MAIN PWB	SGA-1066A	SGA-1065A
⚠	FRONT CABINET	LC-10831-028A-H	LC-10831-027A-H
	TERMINAL SHEET	GG40021-002A-H	GG40021-001A-H
⚠	SPEAKER	CEBSS09D-05KJ2	CEBSS09D-03KJ2
	PACKING CASE	GG10056-079A-H	GG10056-077A-H
	REMOTE CONTROL UNIT	RM-C372GY-1H	RM-C373GY-1H
	Color / Sound System	NTSC / PAL-M / PAL-N	NTSC / PAL-M / PAL-N BTSC(Multi Channel Sound)
	Power Consumption	42W	44W
	Speaker	5cm × 12cm Oval type × 2 (monaural)	5 × 12cm Oval type × 2 (stereo)
	Audio Power Output	2W (monaural)	1.5W+1.5W (stereo)

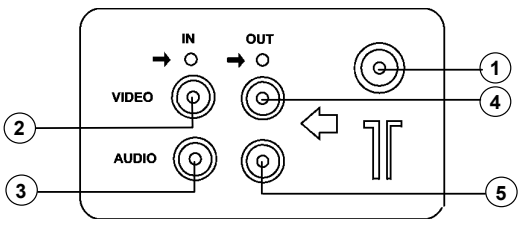
FUNCTIONS

■ FRONT PANEL

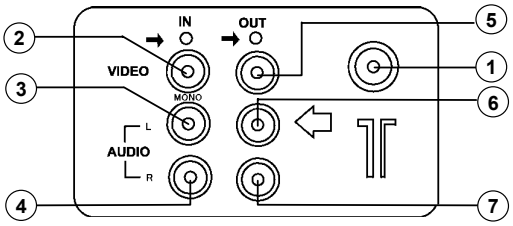


1	MENU buttons
2	CHANNEL −/+ buttons
3	VOLUME −/+ buttons
4	AI ECO sensor
5	REMOTE CONTROL sensor
6	ON TIMER lamp
7	POWER lamp
8	MAIN POWER button
9	A/V INPUT terminal
10	HEADPHONE jack

■ REAR TERMINAL



[AV-14F13/PH]

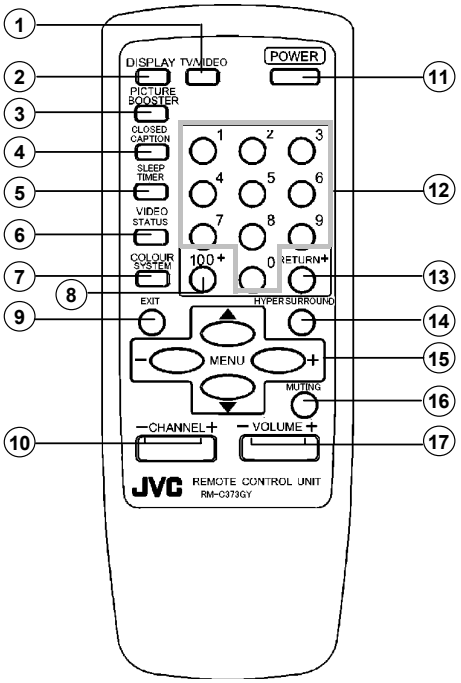


[AV-14F33/PH]

1	ANT Terminal
2	VIDEO INPUT Terminal
3	AUDIO INPUT Terminal
4	VIDEO OUTPUT Terminal
5	AUDIO OUTPUT Terminal

1	ANT Terminal
2	VIDEO INPUT Terminal
3	AUDIO L/MONO INPUT Terminal
4	AUDIO R INPUT Terminal
5	VIDEO OUTPUT Terminal
6	AUDIO L OUTPUT Terminal
7	AUDIO R OUTPUT Terminal

■ REMOTE CONTROL UNIT



This illustration is written about RM-373GY(AV-14F33/PH), There are no key of HYPER SURROUND in the RM-C372GY(AV-14F13/PH).

1	TV/VIDEO key
2	DISPLAY key
3	PICTURE BOOSTER key
4	CLOSED CAPTION key
5	SLEEP TIMER key
6	VIDEO STATUS key
7	COLOUR SYSTEMkey
8	100+ key
9	EXIT key
10	CHANNEL－/＋ key
11	POWER key
12	Number (CH.) key
13	RETURN＋key
14	HYPER SURROUND key **[AV-14F33/PH Only]**
15	MENU key MENU ▲/▼ key MENU －/＋ key
16	MUTING key
17	VOLUME－/＋ key

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power plug.
2. As shown in figure, remove the **4** screws marked Ⓐ and a screw marked Ⓑ .
3. As shown in figure, remove the **2** screws marked Ⓒ
4. Withdraw the rear cover toward you.

[CAUTION]

- When reinstalling the rear cover, carefully push it inward after inserting the MAIN PWB into the rear cover groove.

REMOVING THE MAIN PW BOARD

- After removing the rear cover.

1. Slightly raise the both side of the MAIN PW BOARD by hand, and remove the PWB stopper marked Ⓓ from the front cabinet.
2. Withdraw the MAIN PW BOARD backward.
   (If necessary, remove the wire clamp, connectors etc.)

REMOVING THE SPEAKER

- After removing the rear cover.

1. As shown in figure, remove the **2** screws marked Ⓔ , then remove the speaker.

CHECKING THE MAIN PW BOARD

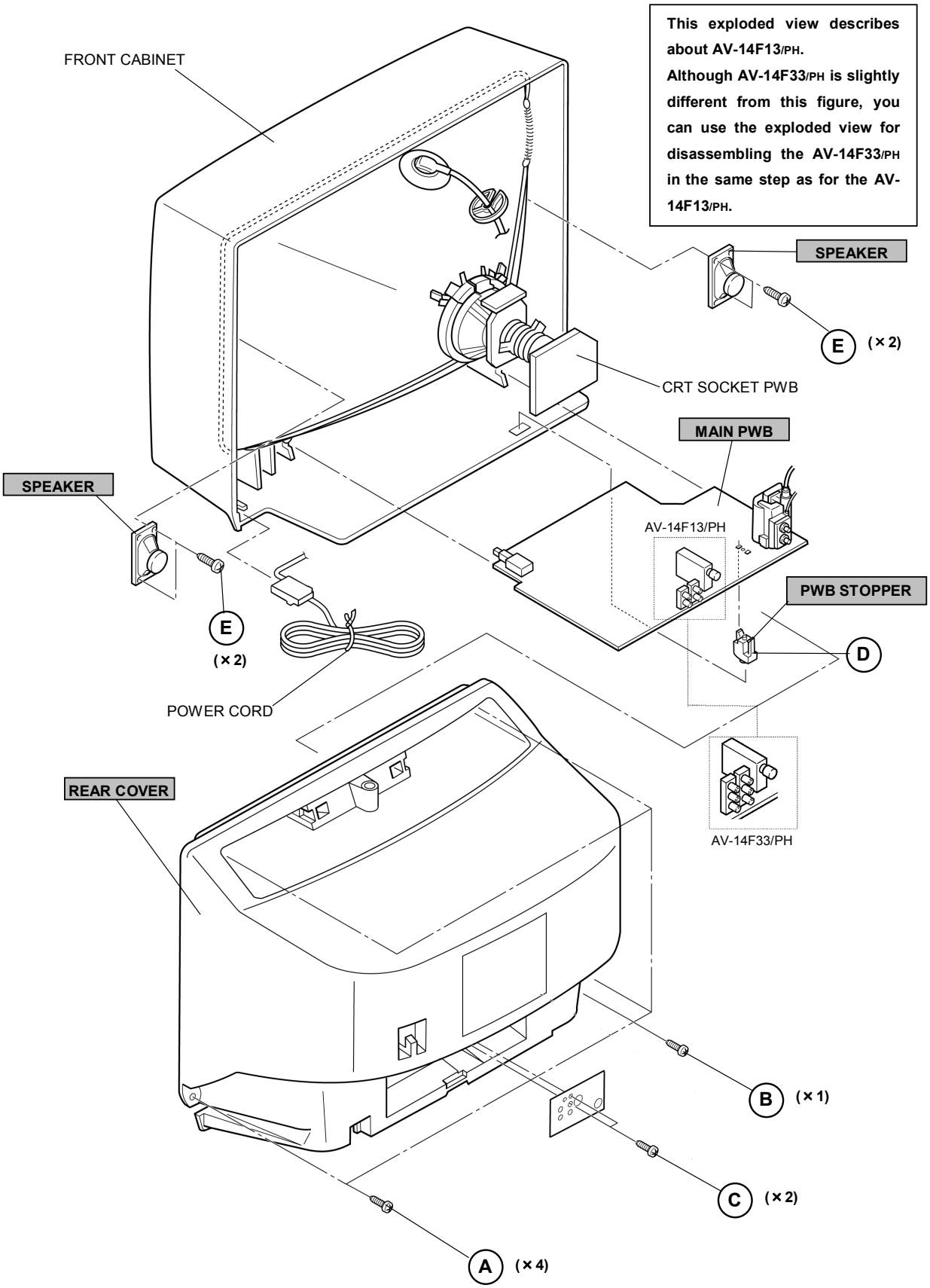
1. To check the back side of the PW board.
   (1) Pull out the MAIN PW board. (Refer to REMOVING THE MAIN PW Board)
   (2) Erect the PW Board vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the PW Board, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the CRT earth wire and other connector are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.


This exploded view describes about AV-14F13/PH.
Although AV-14F33/PH is slightly different from this figure, you can use the exploded view for disassembling the AV-14F33/PH in the same step as for the AV-14F13/PH.
FRONT CABINET
SPEAKER
E (× 2)
CRT SOCKET PWB
MAIN PWB
SPEAKER
AV-14F13/PH
PWB STOPPER
E (× 2)
D
POWER CORD
REAR COVER
AV-14F33/PH
B (× 1)
C (× 2)
A (× 4)

MEMORY IC REPLACEMENT

1. Memory IC

This model uses a memory IC.
The memory IC stores data for proper operation of video and deflection circuits.
When replacing, be sure to use an IC containing this (initial value) data.

2. Memory IC replacement procedure

(1) **Power off**

Switch off the power and disconnect the power cord from the wall outlet.

(2) **Replace the memory IC**.

Be sure to use memory ICs written with the initial data values.

(3) **Power on**

Connect the power cord to the wall outlet and switch on the power.

(4) **System constant check and setting**

1) Simultaneously press the DISPLAY key and VIDEO STATUS key of the remote control unit.
2) The SERVICE MENU screen of Fig.1 is displayed.
3) While the SERVICE MENU is displayed, again simultaneously press the DISPLAY and VIDEO STATUS keys to display the Fig.2 SYSTEM CONSTANT screen.
4) Refer to the SYSTEM CONSTANT table and check the setting items. Where these differ, select the setting item with the MENU UP / DOWN key and adjust the setting value with the MENU LEFT / RIGHT keys.
5) After adjusting, release the MENU LEFT / RIGHT key to store the setting value.
6) Press the EXIT key twice to return the normal screen.

(5) **Receive channel setting**

Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

(6) **User settings**

Check the user setting items according to Table 2.
Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

(7) **SERVICE MENU setting**

Verify what to set in the SERVICE MENU, and set whatever is necessary. (Fig.1) Refer to the SERVICE ADJUSTMENT for setting.

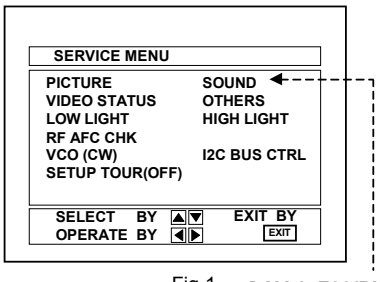
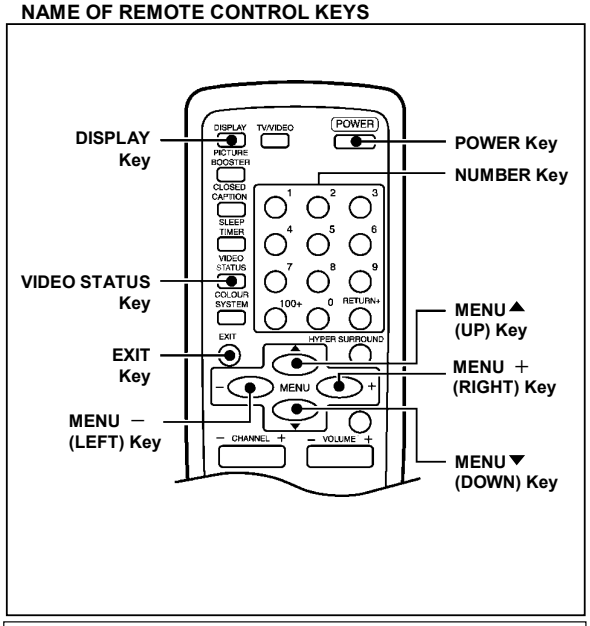


Fig.1 **[AV-14F33/PH Only]**

NAME OF REMOTE CONTROL KEYS



This illustration is written about RM-C373GY(AV-14F33/PH), There are no key of HYPER SURROUND in the RM-C372GY (AV-14F13/PH).

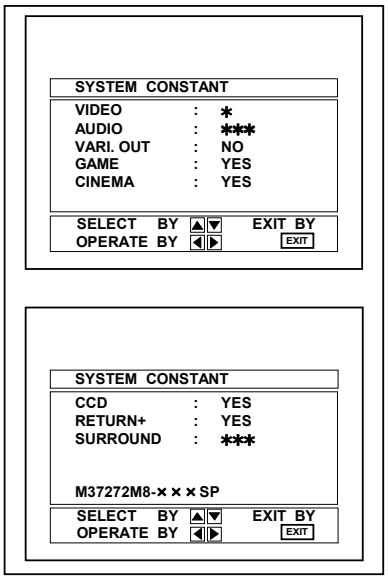


Fig.2

TABLE 1(System Constant Setting)

Setting item	Setting content	Setting value	
		AV-14F13/PH	AV-14F33/PH
VIDEO	1 → 2	1	2
AUDIO	MONO → MONO → MTS	MONO	MTS
VARI. OUT	YES → NO	NO	NO
GAME	YES → NO	YES	YES
CINEMA	YES → NO	YES	YES
CCD	YES → NO	YES	YES
RETURN+	YES → NO	YES	YES
SURROUND	YES → NO	NO	YES

TABLE 2 (User setting value)

Setting item	Setting value
● Setting of FUNCTION	
MAIN POWER	OFF
SUB POWER	ON
CHANNEL	CH 02 (AIR)
PICTURE BOOSTER	OFF
VOLUME	10
TV/VIDEO	TV
CAPTION	OFF (CC1/T1)
DISPLAY	POSITION INDICATION
SLEEP TIMER	0
VIDEO STATUS	STANDARD
HYPER SURROUND	OFF **[AV-14F33/PH Only]**
COLOR SYSTEM	AUTO PAL
SETUP TOUR	ON
● Setting of MENU	
TINT COLOR PICTURE BRIGHT DETAIL	STANDARD
BASS TREBLE BALANCE MTS	CENTER CENTER CENTER STEREO **[AV-14F33/PH Only]**
SET CLOCK	Unnecessary to set : (000)
ON/OFF TIMER	NO
CHANNEL SUMMARY	necessary to set
NOISE MUTING	OFF
BACK GROUND	BLACK
CLOSED CAPTION	CC1 / T1 (OFF at shipping)
LANGUAGE	ENG.

INITIAL SETTING VALUE OF SERVICE MENU

1. **Adjustment of the SERVICE MENU is made on the basis of the initial setting values; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.**
2. **Do not change the initial Setting Values of the Setting (Adjustment) items not listed In "ADJUSTMENT".**

● PICTURE MODE (1/2)

- The four setting items in the video mode No.8 EXT PIC., No.9 EXT BRI., No.10 EXT COL. and No.11 EXT TINT are linked to the items in the TV MODE No.1 PICTURE, No.2 BRIGHT, No.5 COL. NTSC and No.6 TINT, respectively. When the setting items in the TV mode are adjusted, the values in the setting items in the video mode are revised automatically to the same values in the TV mode.(The initial setting values given in ( ) are off-set values.)
- When the four items (No.8, 9, 10 and 11) are adjusted in the video mode, the setting values in each item are revised independently.

: Do not adjust in this area.

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	PICTURE	000～127	040
2.	BRIGHT	000～127	064
3.	COL. PALM	000～127	070
4.	COL. PALN	000～127	070
5.	COL. NTSC	000～127	072
6.	TINT	000～127	065
7.	TV DTL	000～063	028
8.	EXT PIC.	±025	(±000)
9.	EXT BRI.	±025	(±000)
10.	EXT COL.	±025	(±000)
11.	EXT TINT	±025	(+001)
12.	EXT DTL	000～063	030
13.	P/N KILL	000 / 001	001
14.	Y S CONT	000～031	031
15.	TV Y-DL	000～007	001
16.	EXR Y-DL	000～007	002
17.	WPL SW	000 / 001	000
18.	Y GAMMA	000 / 001	000
19.	P/N G P.	000 / 001	000
20.	COL. L SW	000 / 001	001
21.	COL. LMT.	000～003	001
22.	PN C. ATT	000～003	001
23.	OFST. SW	000 / 001	000
24.	OFSET. B-Y	000～015	008
25.	OFSET. R-Y	000～015	008
26.	C-TOF SW	000 / 001	001
27.	TV T FO	000～003	001
28.	TV T Q	000～003	000
29.	EXT T FO	000～003	000
30.	EXT T Q	000～003	000
31.	C-TRAP	000 / 001	000
32.	C-TR. FO	000～003	002
33.	C-TRAP Q	000～003	000
34.	FIX B/W	000 / 001	000
35.	APA P. FO	000～003	001
36.	DC TRAN.	000～007	006
37.	B. ST. SW	000 / 001	000
38.	B. ST. PO.	000～001	000
39.	ABL GAIN	000～007	004
40.	ABL PO.	000～007	000

● PICTURE MODE (2/2)

No.	Setting (Adjustment) item	Variable range	Initial setting value
41.	HALF T.	000～002	001
42.	DRV G SW	000 / 001	000
43.	NT. COMB	000 / 001	001
44.	COIN DET	000～003	001
45.	NOISE L.	000～003	003
46.	VCD MODE	000 / 001	000
47.	V AGC SP	000 / 001	000
48.	H POS. 50	000～031	007
49.	H BLK. 50	000～007	000
50.	V POS. 50	000～007	000
51.	V SIZE50	000～127	024
52.	V S CR50	000～127	018
53.	V LIN. 50	000～031	004
54.	H POS. 60	000～031	012
55.	H BLK. 60	000～007	000
56.	V POS. 60	000～007	000
57.	V SIZE60	000～127	028
58.	V S CR60	000～127	046
59.	V LIN. 60	000～031	004
60.	RF AGC	000～255	183

● SOUND MODE [AV-14F33/PH Only]

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	NOISE	000 / 001	001
2.	IN LEVEL	000～063	020
3.	FH MON.	000 / 001	000
4.	ST VCO	000～063	025
5.	PILOT	000 / 001	000
6.	FILTER	000～063	030
7.	LOW SEP.	000～063	022
8.	HI SEP.	000～063	023
9.	5FH MON.	000 / 001	000
10.	SAP VCO	000～063	026
11.	IN GAIN	000 / 001	000
12.	FIL. OFF.	±010	(±000)

● VIDEO STATUS MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value	
			CINEMA	GAME
1.	TINT	±20	(±0)	(±0)
2.	COLOR	±20	−3	−3
3.	PICTURE	±20	−10	−10
4.	BRIGHT	±20	(±0)	(±0)
5.	DETAIL	±15	(±0)	−5
6.	G DRIVE	−99～+50	−22	(±0)
7.	B DRIVE	−99～+50	−54	(±0)
8.	R CUT.	±10	(±0)	(±0)
9.	G CUT.	±10	(±0)	(±0)
10.	B CUT.	±10	(±0)	(±0)

● OTHERS MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	OSD HP	000～031	023
2.	OSD VP	000～015	012
3.	H-CK SW	000 / 001	000

● LOW LIGHT MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	R CUTOFF	000～255	020
2.	G CUTOFF	000～255	020
3.	B CUTOFF	000～255	020

● HIGH LIGHT MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	G DRIVE	000～255	128
2.	B DRIVE	000～255	128

● RF AFC CHK MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	RF AFC	ON / OFF	ON
2.	FINE	−77～+77	± ＊＊ **(DO NOT ADJUST)**

● I^2C BUS CTRL MODE

No.	Setting (Adjustment) item	Variable range	Initial setting value
1.	I^2C BUS	ON / OFF	**[Fixed ON]**

SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION

1. **You can make the necessary adjustments for this unit with either the Remote Control Unit or With the adjustment tools and parts as given below.**
2. **Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Make sure that connection is correctly made to AC power source.
4. Turn on the power of the set and equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. **Never touch any adjustment parts, which are not specified in the list for this adjustment VRs, transforms, condensers, etc.**
7. Preparation for adjustment
   Unless otherwise specified in the adjustment instructions, preset the following functions with the REMOTE CONTROL UNIT.
   User mode position

VIDEO STATUS	STANDARD
TINT / COLOR / PICTURE BRIGHT / DETAIL	STANDARD
BASS / TREBLE / BALANCE	CENTER **[AV-14F33/PH Only]**
MTS	STEREO **[AV-14F33/PH Only]**
HYPER SURROUND	OFF **[AV-14F33/PH Only]**
SETUP TOUR	ON

ADJUSTMENT EQUIPMENT

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [NTSC / PAL-M / PAL-N]
4. Remote control unit
5. TV audio multiplex signal generator.
6. Frequency counter.

ADJUSTMENT ITEMS

Adjustment item	Adjustment item
B1 POWER SUPPLY	DEFLECTION adjustment
IF VCO adjustment	VIDEO / CHROMA adjustment
RF AGC adjustment	MTS circuit adjustment **[AV-14F33/PH Only]**
FOCUS adjustment	PURITY / CONVERGENCE adjustment.

BASIC OPERATION IN SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

In general basic setting (adjustments) items or verifications are performed in the SERVICE MENU.

(1) PICTURE ····· This set the setting values (adjustment values) of the VIDEO/CHROMA and DEFLECTION circuits.
(2) SOUND **[AV-14F33/PH]** ····· This set the setting values (adjustment values) of the AUDIO circuit.
(3) VIDEO STATUS ····· This is used when the THEATER and GAME MODE is adjusted.
(4) OTHERS ····· This is used when the OTHERS MODE is adjusted.
(5) LOW LIGHT····· This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
(6) HIGH LIGHT ····· This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
(7) RF AFC CHK····· This is used when the RF AFC CHK MODE is verified. **[Do not adjust]**
(8) VCO (CW) ····· This is used when the IF VCO is adjusted.
(9) I^2C BUS CTRL····· This is used when ON/OFF of the I^2C BUS CTRL is set. **[Fixed ON]**
(10) SETUP TOUR OFF····· It should be able to select mode (LANGUAGE and SET CLOCK).
[Should be OFF]

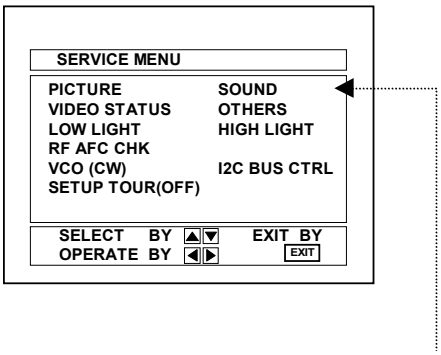
3. Basic Operations of the SERVICE MENU

(1) How to enter the SERVICE MENU.

Press the DISPLAY key and VIDEO STATUS key of the remote control unit at the same time to enter the SERVICE MENU screen ①
shown in figure page later.

(2) SERVICE MENU screen selection

Press the UP / DOWN key of the MENU to select any of the following items.
(The letters of the selected items are displayed in yellow.)



[AV-14F33/PH Only]

(3) Enter the any setting (adjustment) mode

- **PICTURE, SOUND and OTHERS mode**
  1) If select any of PICTURE, SOUND or OTHERS items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ② will be displayed as shown in figure page later.
  2) Then the UP / DOWN key is pressed, the PICTURE mode screen ③ or the SOUND mode screen ④ or the OTHERS mode screen ⑤ is displayed, and the PICTURE, SOUND or OTHERS setting can be performed.

- **VIDEO STATUS, LOW LIGHT, HIGH LIGHT, RF AFC CHK, VCO (CW) and I^2C BUS CTRL mode**
  1) If select any of VIDEO STATUS / LOW LIGHT / HIGH LIGHT / RF AFC CHK / VCO (CW) / I^2C BUS CTRL items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screens ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ will be displayed as shown in figure page later.
  2) Then the settings or verifications can be performed.

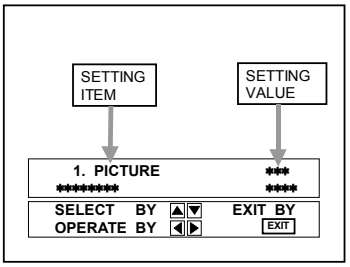
- **SETUP TOUR OFF mode**
  1) If select of SETUP TOUR OFF item from SERVICE MENU , and you can change the ON or OFF(**should be OFF**).
  (Should be <u>OFF</u>)
  ∗ If it is ON, then you turn the TV power off, when you are turn the TV power on again.
  The JVC is logo will be shown about 15 seconds automatically.
  2) MENU -/+ Key ····· Select Language.
  3) MENU ▼ Key····· Auto Search.

(4) Setting method

1) UP / DOWN key of the MENU
   Select the SETTING ITEM.

2) LEFT / RIGHT key of the MENU
   Setting (adjust) the SETTING VALUE of the SETTING ITEM.
   When the key is released the SETTING VALUE will be stored (memorized).

3) EXIT key
   Returns to the previous screen.

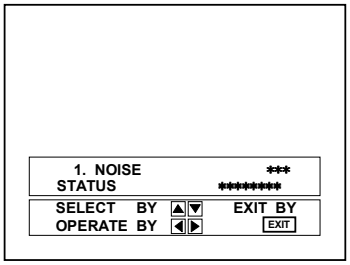


PICTURE MODE

[NOTE] (PICTURE MODE ONLY)
When the INITIAL SETTING VALUE is turned to yellow, you can adjust the values but you cannot adjust the values when it is turned to red.
(Because the signal conditions, etc. are not met.)

(5) Releasing SERVICE MENU

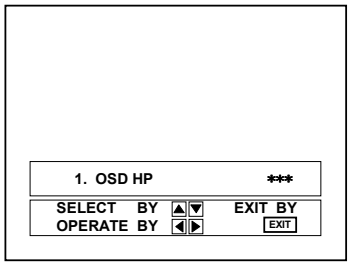
1) After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.



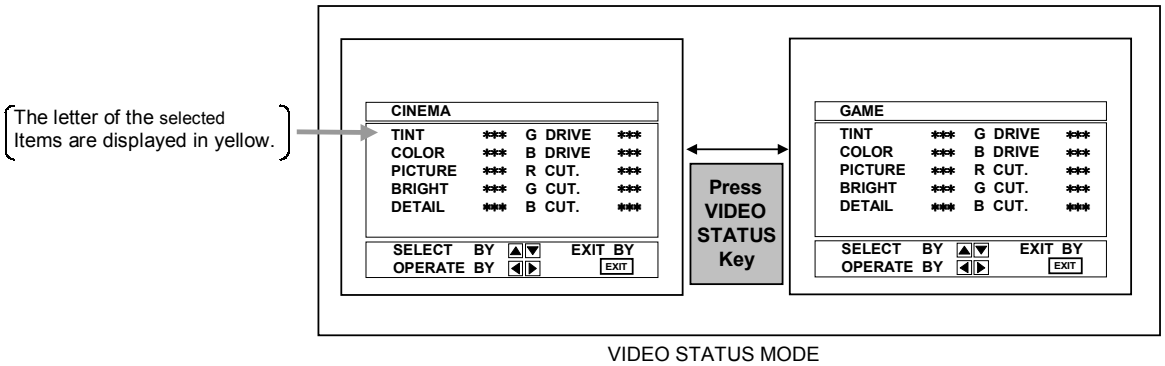
SOUND MODE
[AV-14F33/PH Only]

★ The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.

★ The setting for VCO (CW) are described in the IF VCO page of ADJUSTMENT.

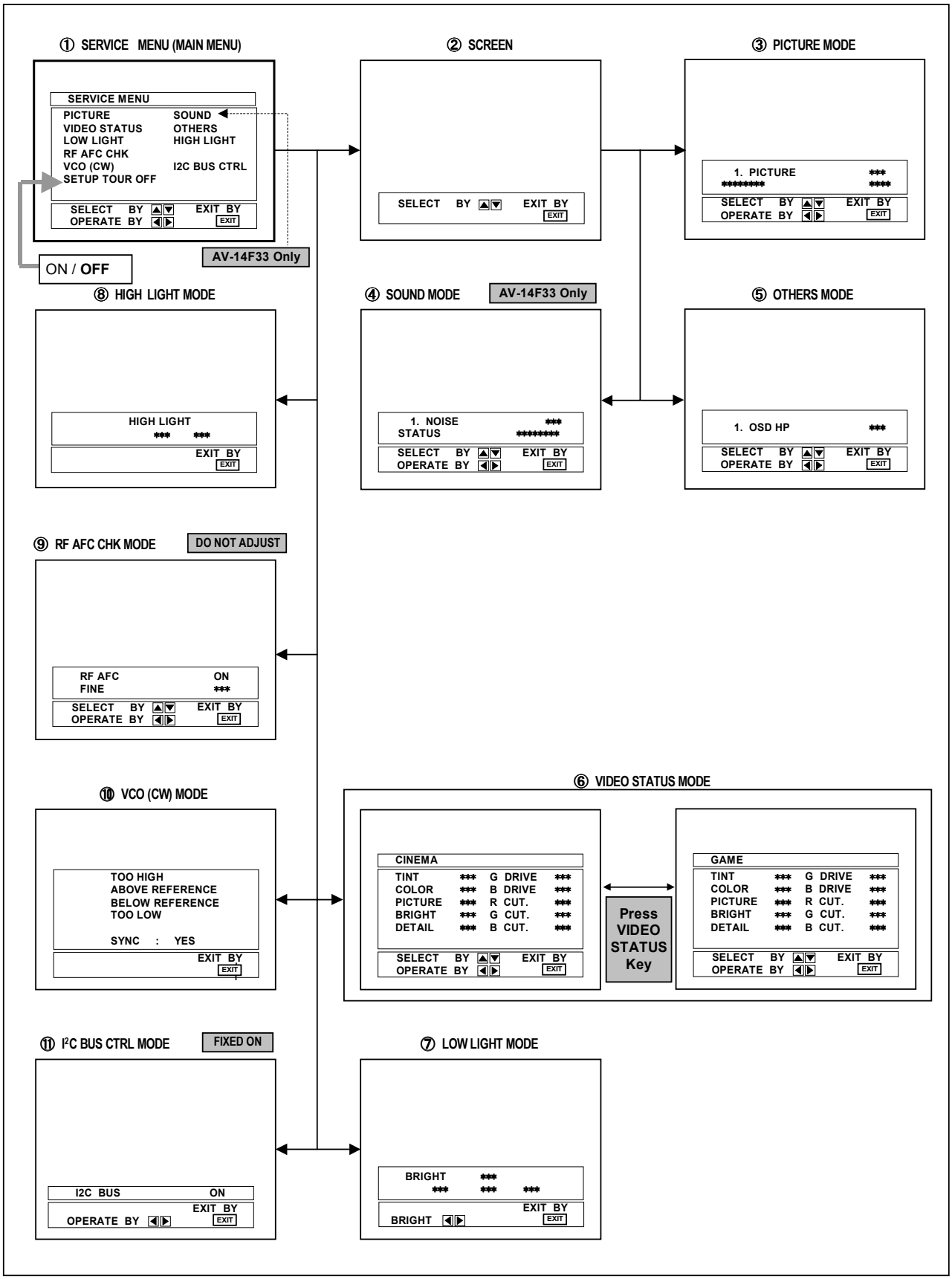


OTHERS MODE

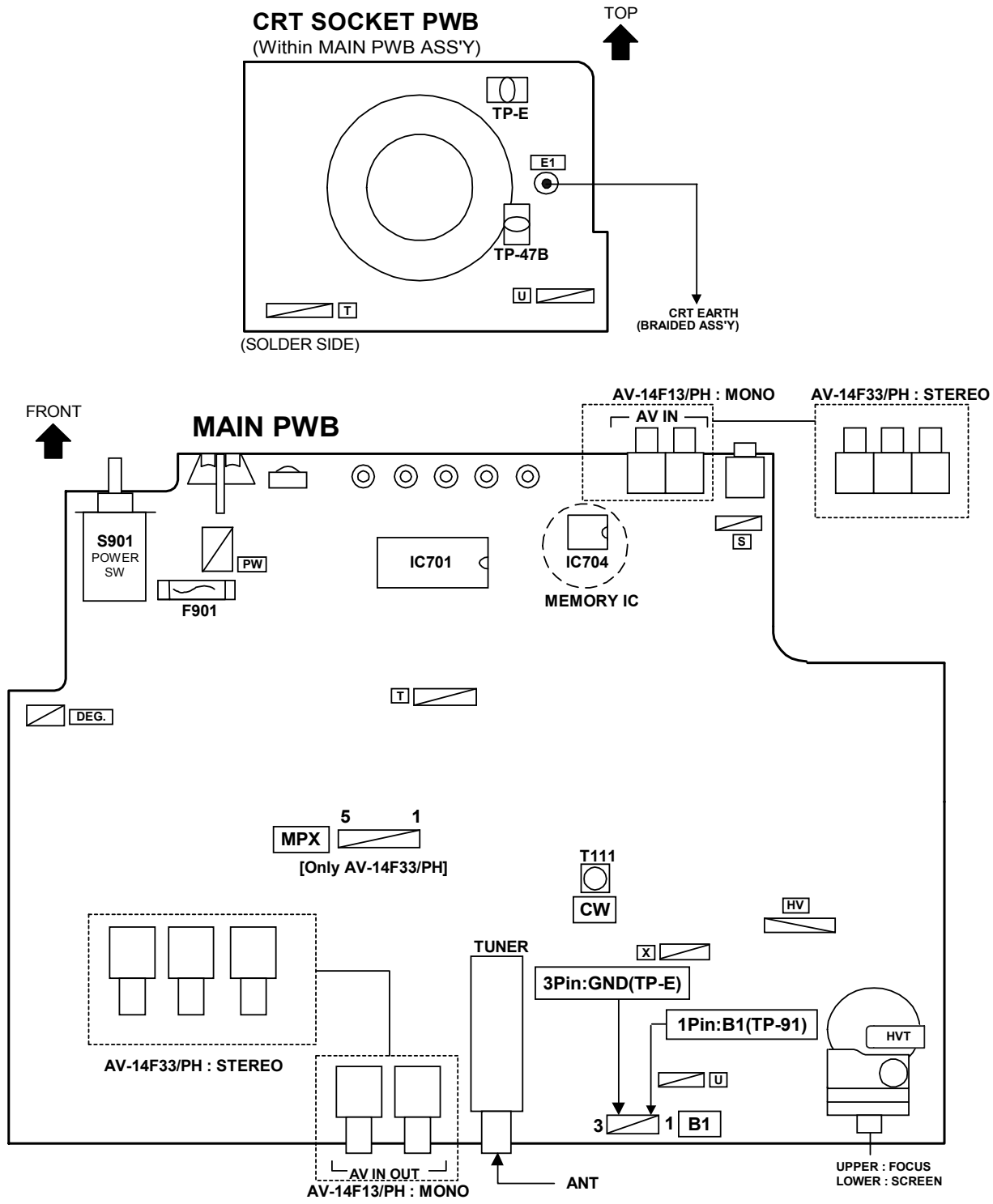


VIDEO STATUS MODE

SERVICE MENU FLOW CHART



ADJUSTMENT LOCATIONS



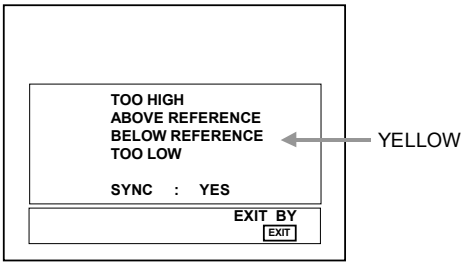
■ ADJUSTMENTS

B1 POWER SUPPLY

Item	Measuring instrument	Test point	Adjustment item	Description
Check of B1 POWER SUPPLY	**DC Voltmeter**	**B1 (B1 Connector 1 pin) (TP-91)** **TP-E(⏚) (B1 Connector 3 pin)**		1. Receive a black and white signal (color off). (NTSC) 2. Connect a DC voltmeter to TP-91(B1) and TP-E(⏚). 3. Confirm that the voltage is DC134.5V±2V.

IF VCO ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment item	Description
IF VCO adjustment	**Signal generator**		**CW TRANSF. (T111)** **[VCO (CW)] mode**	● **Under normal conditions, no adjustment is required.** 1. Receive a broadcast. (use channels without offset frequency). 2. Select the VCO(CW) mode from the SERVICE MENU. 3. Confirm the color change (yellow) from TOO HIGH to TOO LOW by CW TRANSF.(T111) and SYNC : YES being shown on the screen. Then, adjust CW TRANSF.(T111) until BELOW REFERENCE mark turns yellow and confirm again SYNC : YES being shown on the screen.



RF AGC ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment item	Description
RF AGC adjustment			**No.60 RF AGC**	1. Receive a broadcast. 2. Select No.60 RF AGC of the PICTURE mode in SERVICE MENU. 3. Press the MUTE key and turn off color. 4. With the MENU LEFT key, get noise in the screen picture. (0 side of setting value) 5. Press the MENU RIGHT key and stop when noise disappears from the screen. 6. Change to other channels and make sure that there is no irregularity. 7. Press the MUTE key and get color out.

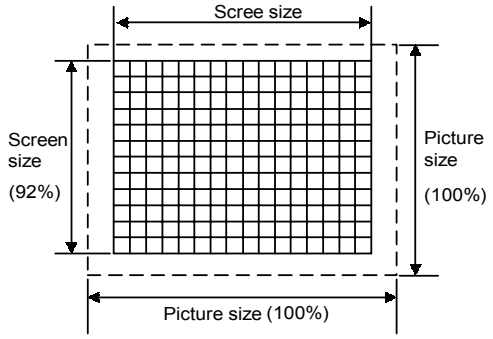
No.	Setting item	Variable range	Initial setting value
60	**RF AGC**	000～255	**183**

FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment item	Description
FOCUS adjustment	**Signal generator**		**FOCUS VR** **[In HVT]**	1. Receive a crosshatch signal. 2. While looking at the screen, adjust FOCUS VR so that the vertical and horizontal lines will be clear and in fine detail. 3. Make sure that the picture is in focus even when the screen gets darkened.

DEFLECTION ADJUSTMENT

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment item</th><th>Description</th></tr>
<tr><td rowspan="2">V. HEIGHT,
V. POSITION,
V. LIN.
V. S CR
adjustment</td><td rowspan="2">Signal generator</td><td rowspan="2"></td><td>No.56 V POS. 60
No.57 V SIZE 60
No.58 V S CR60
No.59 V. LIN. 60</td><td>[60Hz]
1. Receive a crosshatch signal.(NTSC or PAL-M)
2. Confirm that the value of PICTURE MODE No.56 V POS. 60 is 0.
3. Confirm the initial setting value of the No.57 V SIZE 60, No.58 V S CR60 and No.59 V LIN. 60.
4. Adjust the vertical screen size to 92% with the PICTURE MODE No.57 V SIZE60.
5. Adjust the PICTURE MODE No.59 L LIN. 60 and No.58 V S CR60 to get the best vertical linearity.

NOTE :
The PICTURE MODE No.56 V POS. 60 is fixed on value 0.</td></tr>
<tr><td>No.50 V POS.50
No.51 V SIZE 50
No.52 V S CR50
No.53 V LIN.50</td><td>[50Hz]
1. Receive a crosshatch signal. (PAL-N)
2. Confirm the initial setting value of the No.50 V POS.50, No.51 V SIZE 50, No.52 V S CR 50 and No.53 V LIN.50.
3. Adjust the vertical screen size to 92% with the PICTURE MODE No.51 V SIZE50.
4. Adjust the PICTURE MODE No.53 V LIN.50 and No.52 V S CR50 to get the best vertical linearity.
5. Adjust the PICTURE MODE No.50 V POS.50 so that the vertical center line comes close to the CRT vertical center as much as possible.
● Readjust V SIZE, V LIN., V S CR if necessary.</td></tr>
<tr><td colspan="2"></td><td colspan="2"> 
</td></tr>
<tr><td rowspan="2">H. POSITION
adjustment</td><td rowspan="2">Signal generator</td><td rowspan="2"></td><td>No.54 H POS.60</td><td>[60Hz]
1. Receive a crosshatch signal. (NTSC or PAL-M)
2. Select the No.54 H POS. 60 of the PICTURE mode in SERVICE MENU.
3. Confirm the initial setting value of the No.54 H POS. 60.
4. Adjust the No.54 H POS. 60 until the screen will be horizontally centered.</td></tr>
<tr><td>No.48 H POS.50</td><td>[50Hz]
1. Receive a crosshatch signal. (PAL-N)
2. Select the No.48 H POS. 50 of the PICTURE mode in SERVICE MENU.
3. Confirm the initial setting value of the No.48 H POS. 50.
4. Adjust the No.48 H POS. 50 until the screen will be horizontally centered.</td></tr>
</table>

No.	Setting item	Variable range	Initial setting value
56	**V POS.60**	000～007	**000**
57	**V SIZE 60**	000～127	**028**
58	**V S CR60**	000～127	**046**
59	**V. LIN60**	000～31	**004**

No.	Setting item	Variable range	Initial setting value
50	**V POS.50**	000～007	**000**
51	**V SIZE 50**	000～127	**024**
52	**V S CR50**	000～127	**018**
53	**V LIN.50**	000～31	**004**

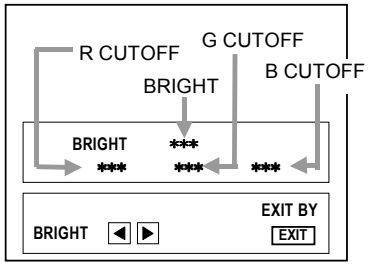
No.	Setting item	Variable range	Initial setting value
54	**H POS.60**	000～031	**012**

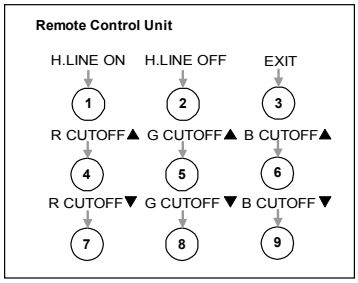
No.	Setting item	Variable range	Initial setting value
48	**H POS.50**	000～031	**007**

VIDEO / CHROMA ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment item	Description
WHITE BALANCE (Low Light) adjustment	**Signal generator Remote control unit**		**BRIGHT** **R CUTOFF** **G CUTOFF** **B CUTOFF** **SCREEN VR**	1. Receive a black and white signal (color off). 2. Select the LOW LIGHT mode from the SERVICE MENU. 3. Confirm the Initial setting value of BRIGHT, R CUTOFF, G CUTOFF and B CUTOFF. 4. Display a single horizontal line by pressing the ① key of the remote control unit. 5. Turn the screen VR all the way to the left. 6. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears faintly. 7. Adjust the two colors which did not appear until the single horizontal line that is displayed becomes white using the ④ to ⑨ keys of the remote control unit. 8. Turn the screen VR to where the single horizontal line glows faintly. 9. Press the ② key to return to the regular screen.

[LOW LIGHT] MODE

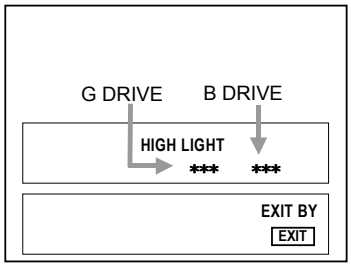


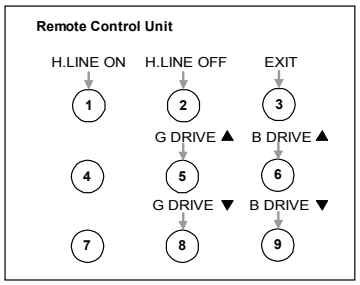


No.	Setting item	Variable range	Initial setting value
2	**BRIGHT**	0～127	**064**
1	**R CUTOFF**	0～255	**020**
2	**G CUTOFF**	0～255	**020**
3	**B CUTOFF**	0～255	**020**

WHITE BALANCE (High Light) adjustment	**Signal generator Remote control unit**		**G DRIVE** **B DRIVE**	1. Receive a black and white signal (color off). 2. Select the HIGH LIGHT mode in the SERVICE MENU. 3. Confirm the initial setting value of G DRIVE and B DRIVE. 4. Adjust the screen color to white with the⑤, ⑥, ⑧ and ⑨ keys of the remote control unit.

[HIGH LIGHT] MODE

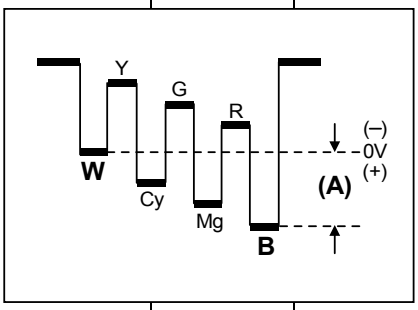


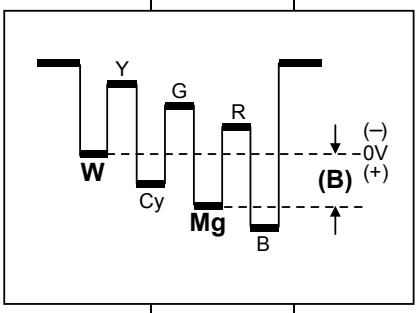


No.	Setting item	Variable range	Initial setting value
1	**G DRIVE**	000～255	**128**
2	**B DRIVE**	000～255	**128**

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment item</th><th>Description</th></tr>
<tr><td>SUB BRIGHT adjustment</td><td>Remote control unit</td><td></td><td>No.2 BRIGHT</td><td>1. Receive a broadcast.
2. Select No.2 BRIGHT of the PICTURE mode in SERVICE MENU.
3. Confirm the initial setting value of the No.2 BRIGHT.
4. If the brightness is not the best with the initial setting value, make fine adjustment of the No.2 BRIGHT until you get the optimum brightness.</td></tr>
<tr><td colspan="4"><table><tr><th>No.</th><th>Setting item</th><th>Variable range</th><th>Initial setting value</th></tr><tr><td>2</td><td>BRIGHT</td><td>000～127</td><td>064</td></tr></table></td></tr>
<tr><td>SUB CONTRAST adjustment</td><td>Remote control unit</td><td></td><td>No.1 PICTURE</td><td>1. Receive a broadcast.
2. Select No.1 PICTURE of the PICTURE mode in SERVICE MENU.
3. Confirm the initial setting value of the No.1 PICTURE.
4. If the contrast is not the best with the initial setting value, make fine adjustment of the No.1 PICTURE until you get the optimum contrast.</td></tr>
<tr><td colspan="4"><table><tr><th>No.</th><th>Setting item</th><th>Variable range</th><th>Initial setting value</th></tr><tr><td>1</td><td>PICTURE</td><td>000～127</td><td>040</td></tr></table></td></tr>
<tr><td rowspan="3">SUB COLOR Adjustment [I]</td><td rowspan="3">Remote control unit</td><td rowspan="3"></td><td>No.3 COL. PALM</td><td>[PAL-M]
1. Receive a PAL-M broadcast.
2. Select No.3 COL. PALM of the PICTURE mode in SERVICE MENU.
3. Confirm the initial setting value of the No.3 COL. PALM.
4. If the color is not the best with the initial setting value, make fine adjustment until you get the best color.</td></tr>
<tr><td>No.4 COL. PALN</td><td>[PAL-N]
1. Receive a PAL-N broadcast.
2. Select No.4 COL. PALN of the PICTURE mode in SERVICE MENU.
3. Confirm the initial setting value of the No.4 COL. PALN.
4. If the color is not the best with the initial setting value, make fine adjustment until you get the best color.</td></tr>
<tr><td>No.5 COL. NTSC</td><td>[NTSC]
1. Receive a NTSC broadcast.
2. Select No.5 COL. NTSC of the PICTURE mode in SERVICE MENU.
3. Confirm the initial setting value of the No.5 COL. NTSC.
4. If the color is not the best with the initial setting value, make fine adjustment until you get the best color.</td></tr>
<tr><td colspan="4"><table><tr><th>No.</th><th>Setting item</th><th>Variable range</th><th>Initial setting value</th></tr><tr><td>3</td><td>COL.PALM</td><td>000～127</td><td>070</td></tr><tr><td>4</td><td>COL.PALN</td><td>000～127</td><td>070</td></tr><tr><td>5</td><td>COL.NTSC</td><td>000～127</td><td>072</td></tr></table></td></tr>
<tr><td>SUB TINT adjustment [I]</td><td>Remote control unit</td><td></td><td>No. 6 TINT</td><td>1. Receive a NTSC color bar signal.
2. Select No. 6 TINT of the PICTURE mode in SERVCE MENU.
3. Confirm the initial setting value of the No. 6 TINT.
4. If the tint is not the best with the initial setting value, make fine adjustment until you get the best tint.</td></tr>
<tr><td colspan="4"><table><tr><th>No.</th><th>Setting item</th><th>Variable range</th><th>Initial setting value</th></tr><tr><td>6</td><td>TINT</td><td>000～127</td><td>065</td></tr></table></td></tr>
</table>

Item	Measuring instrument	Test point	Adjustment item	Description
Adjustment of SUB COLOR-Ⅱ	● Signal generator ● Oscillo-scope ● Remote control unit	**TP-47B** **TP-E(⏚)** **[CRT SOCKET PWB]**		**[Method of adjustment using measuring instrument]**
			3. COL. PALM	**(PAL-M COLOR)** 1. Receive a PAL-M full field color bar signal (75% white). 2. Select the sub menu screen PICTURE from the SERVICE MENU. 3. Select 3. COL. PALM with the MENU ▲/▼ key , and confirm its initial setting value. 4. Connect the oscilloscope between TP-47B and TP-E. 1. Adjust 3. COL. PALM to set the value **(A)** in the figure to **+7V (W & B)**, with the MENU －/＋ key
			4. COL. PALN	**(PAL-N COLOR)** 1. Receive a PAL-N full field color bar signal (75% white). 2. In the sub menu screen PICTURE, select 4. COL. PALN with the MENU ▲/▼ key, and confirm its initial setting value. 3. Connect the oscilloscope between TP-47B and TP-E. 4. Adjust 4. COL. PALN to set the value **(A)** in the figure to **+18V(W & B)**, with the MENU －/＋ key.
			5. COL. NTSC	**(NTSC COLOR)** 1. Receive a NTSC full field color bar signal (75% white). 2. In the sub menu screen PICTURE, select 5. COL. NTSC with the MENU ▲/▼ key, and confirm its initial setting value. 3. Connect the oscilloscope between TP-47B and TP-E. 4. Adjust 5. COL. NTSC to set the value **(A)** in the figure to **+22V(W & B)**, with the MENU －/＋ key.
Adjustment of SUB TINT-Ⅱ	● Signal generator ● Oscillo-scope **Remote control unit**	**TP-47B** **TP-E(⏚)** **[CRT SOCKET PWB]**		**[Method of adjustment using measuring instrument]**
			6.TINT	1. Receive a NTSC 3.58 color bar signal (full field color bar 75%white). 2. Select the sub menu screen PICTURE from the SERVICE MENU. 3. Select 6. TINT with the MENU ▲/▼ key, and confirm its initial setting value. 4. Connect the oscilloscope betweenTP-47B and TP-E. 5. Adjust 6. TINT to set the value **(B)** in the figure to **+14V(W & Mg)**, with the MENU －/＋ key.

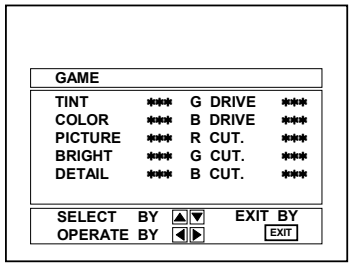




VIDEO STATUS ADJUSTMENT (Do not adjust. Each value should be set to the initial value.)

Item	Measuring instrument	Test point	Adjustment item	Description
Setting of VIDEO STATUS	**Remote control unit**		**TINT** **COLOR** **PICTURE** **BRIGHT** **DETAIL** **G DRIVE** **B DRIVE** **R CUT.** **G CUT.** **B CUT.**	1. Select the sub menu screen VIDEO STATUS-CINEMA from the SERVICE MENU. 2. Select TINT ～ B CUT. with the MENU ▲/▼ key, and reset each value to the initial setting value with the MENU －/＋ key. 3. Press the VIDEO STATUS key on the remote control unit to select VIDEO STATUS-GAME. (Each time you press the VIDEO STATUS key, CINEMA and GAME alternates.) 4. Make similar settings as in 2 above.

SUB MENU : VIDEO STATUS



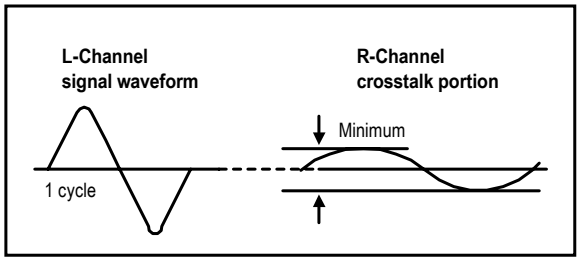
No.	Setting item	Variable Range	CINEMA	GAME
1	**TINT**	±20	(±**0**)	(±**0**)
2	**COLOR**	±20	**-3**	**-3**
3	**PICTURE**	-30～+20	**-10**	**-10**
4	**BRIGHT**	±20	(±**0**)	(±**0**)
5	**DETAIL**	±15	(±**0**)	(±**0**)
6	**G DRIVE**	-99～+50	**-22**	**-5**
7	**B DRIVE**	-99～+50	**-54**	(±**0**)
8	**R CUT.**	±10	(±**0**)	(±**0**)
9	**G CUT.**	±10	(±**0**)	(±**0**)
10	**B CUT**	±10	(±**0**)	(±**0**)

MTS CIRCUIT ADJUSTMENT [AV-14F33/PH Only]

Item	Measuring instrument	Test point	Adjustment part	Description
INPUT LEVEL check			**No.2 IN LEVEL**	1. Select the No.2 IN LEVEL of the SOUND mode in SERVICE MENU. 2. Verify that the No.2 IN LEVEL is set at its initial setting value.
STEREO VCO adjustment	**Signal generator** **Frequency counter**	**R OUT [AUDIO OUT]**	**No.3 FH MON** **No.4 ST VCO**	1. Receive a NTSC RF signal (non modulated sound signal) from the antenna terminal. 2. Select the No.3 FH MON of SOUND mode in SERVICE MENU, change the setting value from 0 to 1. 3. Connect the frequency connector to R OUT RCA pin of the AUDIO OUT 4. Select the No.4 ST VCO. 5. Confirm the initial setting value of the No.4 ST VCO. 6. Adjust the No.4 ST VCO so that the frequency counter will display 15.73kHz±0.1kHz. 7. Select the No.3 FH MON of the SOUND mode, and reset the setting value from 1 to 0.
SAP VCO adjustment	**Signal generator** **Frequency counter**	**MPX Connector** **4 pin SDA** **3 pin GND** **[MAIN PWB]** **R OUT [AUDIO OUT]**	**No.9 5FH MON.** **No.10 SAP VCO.**	1. Receive a NTSC RF signal (non modulated sound signal) from the antenna terminal. 2. Connect between pin 4 of MPX connector and GND (pin 3 of MPX connector) through 1MΩ resistor. 3. Select the No.9 5FH MON. of the SOUND mode in SERVICE MENU, and reset the setting value from 0 to 1. 4. Connect the frequency connector to R OUT RCA pin of the AUDIO OUT. 5. Select the No.10 SAP VCO. 6. Confirm the initial setting value of No.10 SAP VCO. 7. Adjust the No.10 SAP VCO so that the frequency connector will display 78.67kHz±0.5kHz. 8. Select the No.9 5FH MON. of the SOUND mode, and reset the setting value from 1 to 0.
FILTER check			**No.6 FILTER**	1. Select the No.6 FILTER of the SOUND mode in SERVICE MENU. 2. Verify that the No.6 FILTER is set at its initial setting value.
SEPARATION adjustment	**TV audio multiplex signal generator** **Oscilloscope**	**L OUT** **R OUT [AUDIO OUT]**	**No.7 LOW SEP.** **No.8 HI SEP.**	1. Input a stereo L signal (300Hz) from the TV Audio multiplex signal generator to the antenna terminal. (NTSC) 2. Connect an oscilloscope to L OUT RCA pin of the AUDIO OUT, and display one cycle portion of the 300Hz signal. 3. Change the connection of the oscilloscope to R OUT RCA pin of the AUDIO OUT, and enlarge the voltage axis. 4. Select the No.7 LOW SEP. of the SOUND mode in SERVICE MENU. 5. Confirm the initial setting value of the No.7 LOW SEP. 6. Adjust the No.7 LOW SEP. so that the stroke element of the 300Hz signal will become minimum. 7. Change the signal to 3kHz, and similarly adjust the “No.8 HI SEP.

No.	Setting item	Variable range	Initial setting value
2	IN LEVEL	000～063	020
3	FH MON	000 / 001	000
4	ST VCO	000～063	025

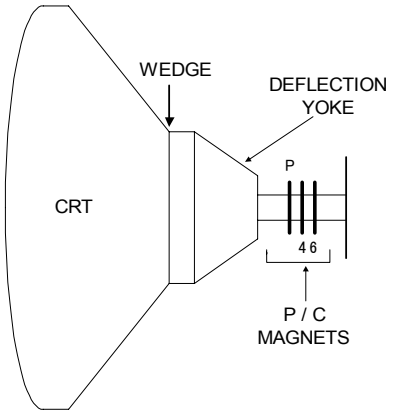
No.	Setting item	Variable range	Initial setting value
9	5FH MON.	000 / 001	000
10	SAP VCO.	000～063	026
6	FILTER	000～063	030
7	LOW SEP.	000～063	022
8	HI SEP.	000～063	063



PURITY / CONVERGENCE ADJUSTMENT

PURITY ADJUSTMENT

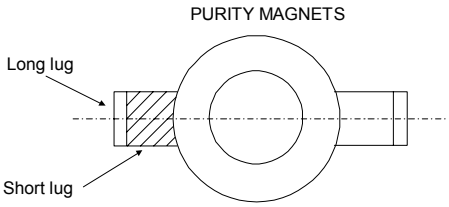
1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a crosshatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• P/C MAGNETS

P : PURITY MAGNET
4 : 4 POLES (convergence magnets)
6 : 6 POLES (convergence magnets)

Fig.1



Bring the long lug over the short lug and position them horizontally.

Fig.2

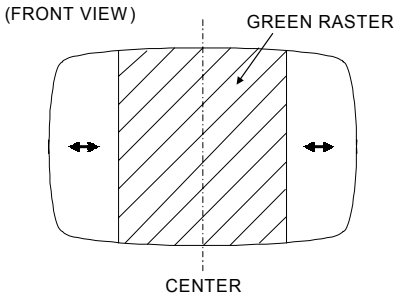


Fig.3

STATIC CONVERGENCE ADJUSTMENT

1. Input a crosshatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta(red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

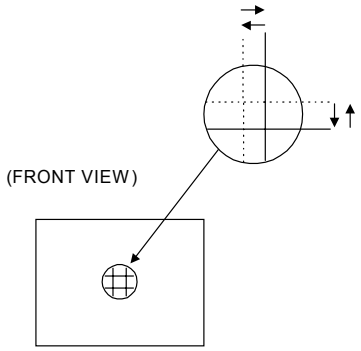


Fig.1

DYNAMIC CONVERGENCE ADJUSTMENT

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
3. Repeat 1 and 2 above, and make best convergence.

(FRONT VIEW)

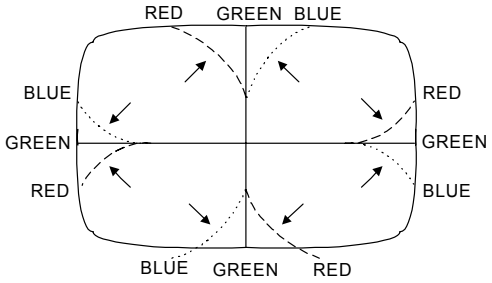


Fig.2

● After adjustment, fix the wedge at the original position.
Fasten the retainer screw of the deflection yoke.
Fix the 6 magnets with glue.

(FRONT VIEW)

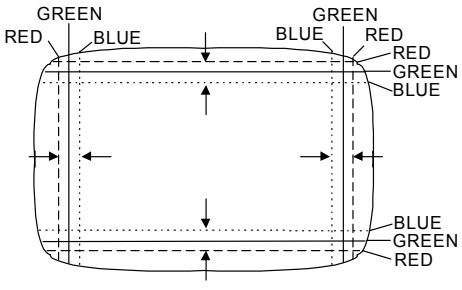


Fig.3

HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.
This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

(1) Turn the POWER SW ON.
(2) As shown in Fig.2, set the resistor (between [X] connector [1] & [3]).
(3) Make sure that the screen picture disappears.
(4) Temporarily unplug the power cord.
(5) Remove the resistor (between [X] connector [1] & [3]).
(6) Again plug the power cord, make sure that the normal picture is displayed on the screen.

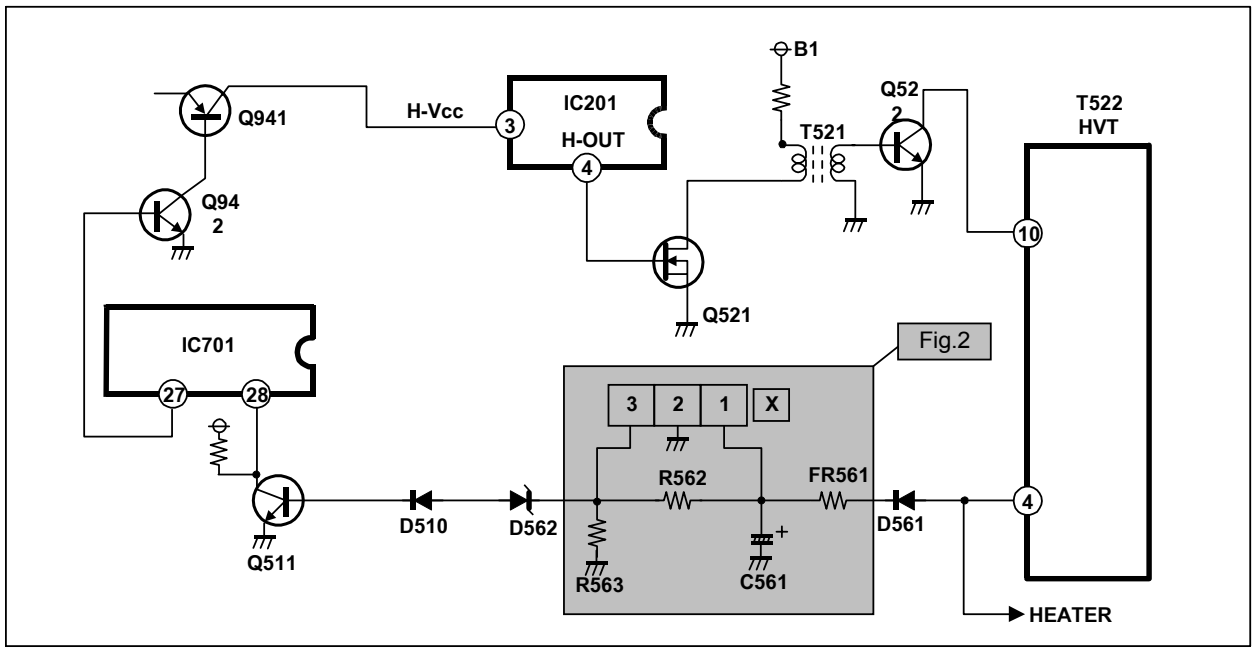


Fig. 1

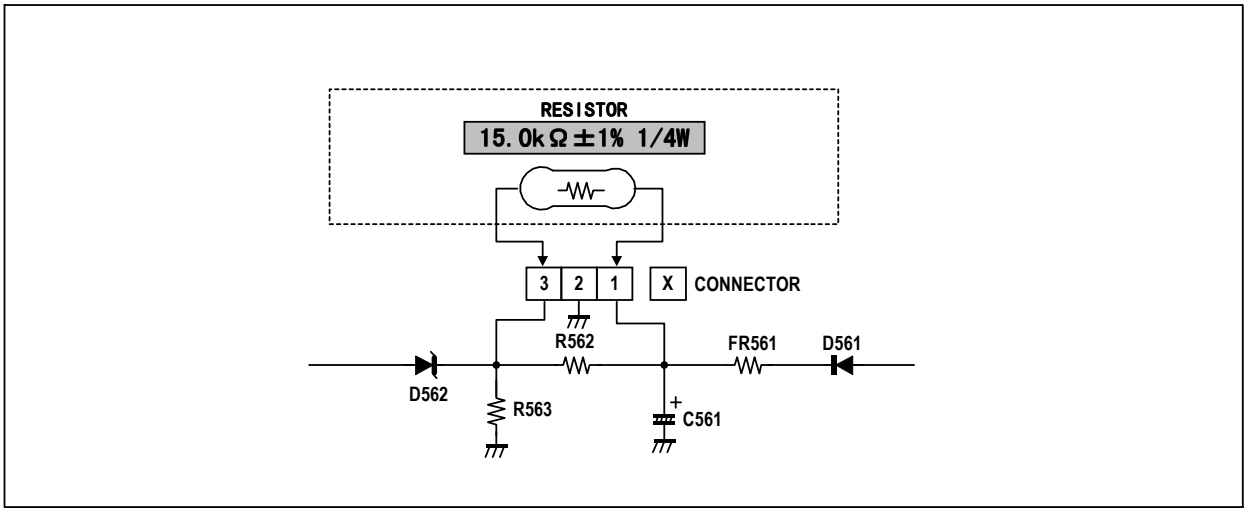


Fig. 2

SELF CHECK FUNCTIONS

1. Outline

This model includes protector functions for Over-current, X-ray and CRT NECK which cutoff the sub-power in the event of a malfunction and inform of the malfunction by flashing ON TIMER LED.

The malfunction is detected according to the state of the control line input connected to the main CPU.

2. Self check items

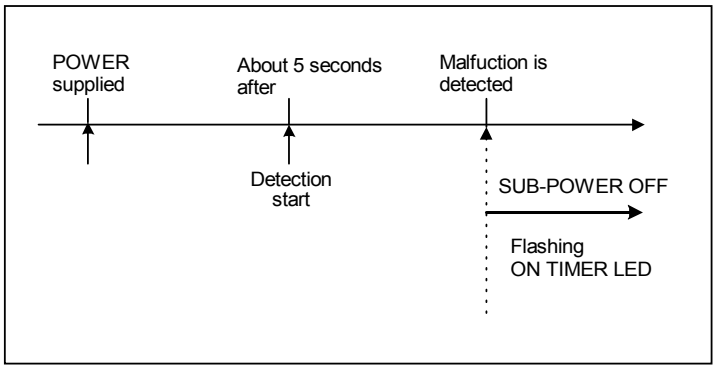
Check item	Detected contents	Detection method	Abnormality state
Over-current protector	An over-current on the B1 line and Audio-Vcc line is detected. **[AV-14F13/PH]** An over-current on the B1 line is detected. **[AV-14F33/PH]**	The main CPU detects at 1 second intervals. If NG is detected for more than 1 ms, a malfunction is interpreted.	During an abnormality the sub-power is cutoff. The remote controller power key operation is not recognized and sub-power off is maintained until the power cord is unplugged and reinserted.
X-ray protector	Operation of X-ray protection circuit	The main CPU detects at 1 second intervals. If NG is detected for more than 1 ms, a malfunction is interpreted.	During an abnormality the sub-power is cutoff. The remote controller power key operation is not recognized and sub-power off is maintained until the power cord is unplugged and reinserted.
CRT NECK protector	When the vertical circuit S-correction capacitor C413 is shorted, detect the potential drop of the C413, and prevent the burn damage to the CRT NECK.	The main CPU detects at 1 second intervals. If NG is detected for more than 1 ms, a malfunction is interpreted.	During an abnormality the sub-power is cutoff. The remote controller power key operation is not recognized and sub-power off is maintained until the power cord is unplugged and reinserted.

3. Self check indicating function

The self check function begins detection about 5 seconds after power is supplied.

In the event a malfunction is detected, the sub-power is cutoff immediately.

At this time, the ON TIMER LED flashes to inform of the malfunction.



Item	LED ON / OFF intervals	Priority of detection
OCP/X-ray	every 0.5-second	1
NECK	every 1.0-second	2

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

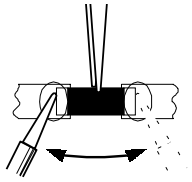
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

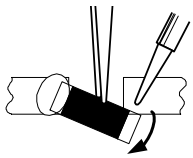
1. How to remove Chip parts

◆ **Resistors, capacitors, etc.**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

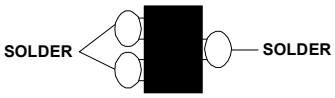


(2) Shift with tweezers and remove the chip part.

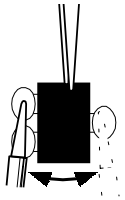


◆ **Transistors, diodes, variable resistors, etc.**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

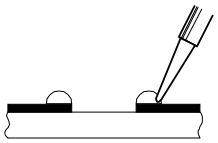


Note : After removing the part, remove remaining solder from the pattern.

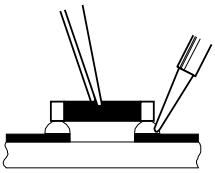
2. How to install Chip parts

◆ **Resistors, capacitors, etc.**

(1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

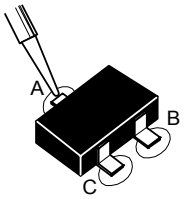


◆ **Transistors, diodes, variable resistors, etc.**

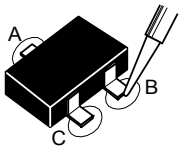
(1) Apply solder to the pattern as indicated in the figure.

(2) Grasp the chip part with tweezers and place it on the solder.

(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



AV-14F13
AV-14F33

JVC

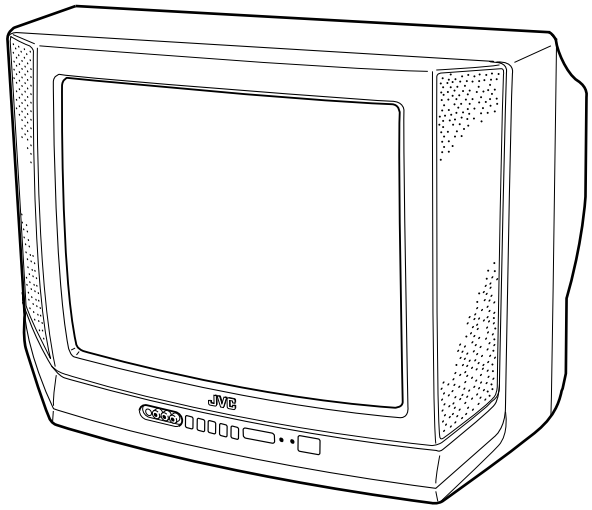
SCHEMATIC DIAGRAMS

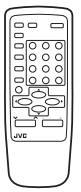
COLOR TELEVISION

AV-14F13/PH
AV-14F33/PH

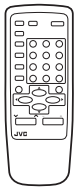
BASIC CHASSIS
GA2

CD-ROM No.SML200208





RM-C372GY
[AV-14F13/PH]



RM-C373GY
[AV-14F33/PH]

CONTENTS

■ NOTE ON USING CIRCUIT DIAGRAMS ---------- 2-1
■ SEMICONDUCTOR SHAPES ---------- 2-2
■ BLOCK DIAGRAM ---------- 2-3
■ CIRCUIT DIAGRAMS ---------- 2-7
■ PATTERN DIAGRAMS ---------- 2-15
■ CHANNEL CHART ---------- 2-21

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No.52021
Jul. 2002

CONTENTS

SEMICONDUCTOR SHAPES ---------- 2-2

BLOCK DIAGRAM
[AV-14F13] ---------- 2-3
[AV-14F33] ---------- 2-5

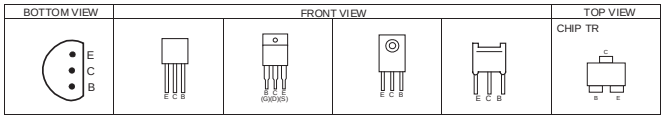
CIRCUIT DIAGRAMS
[AV-14F13]
MAIN PWB CIRCUIT DIAGRAM ---------- 2-7
MAIN PWB & CRT SOCKET PWB CIRCUIT DIAGRAM ---------- 2-9
[AV-14F33]
MAIN PWB CIRCUIT DIAGRAM ---------- 2-11
MAIN PWB & CRT SOCKET PWB CIRCUIT DIAGRAM ---------- 2-13

PATTERN DIAGRAMS
[AV-14F13]
MAIN PWB PATTERN ---------- 2-15
CRT SOCKET PWB PATTERN (Within MAIN PWB) ---------- 2-19
[AV-14F33]
MAIN PWB PATTERN ---------- 2-17
CRT SOCKET PWB PATTERN (Within MAIN PWB) ---------- 2-20

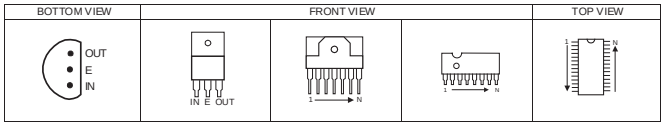
CHANNEL CHART ---------- 2-21

SEMICONDUCTOR SHAPES

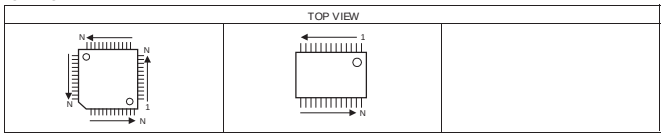
TRANSISTOR



IC



CHIP IC



AV-14F13/PH,AV-14F33/PH
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ/V
(4)Oscilloscope sweeping time	:H ⇒ 20μS/div
	:V ⇒ 5mS/div
	:Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board :R1209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	:[Ω]
K	:[K Ω]
M	:[M Ω]

● Rated allowable power

No indication	:1/ 16 [W]
Others	:As specified

● Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

● Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

● Type

No indication	:Ceramic capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

(4)Power Supply

∗ Respective voltage values are indicated

(5)Test point

(6)Connecting method

(7)Ground symbol

:LIVE side ground
:ISOLATED(NEUTRAL) side ground
:EARTH ground
:DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND.Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

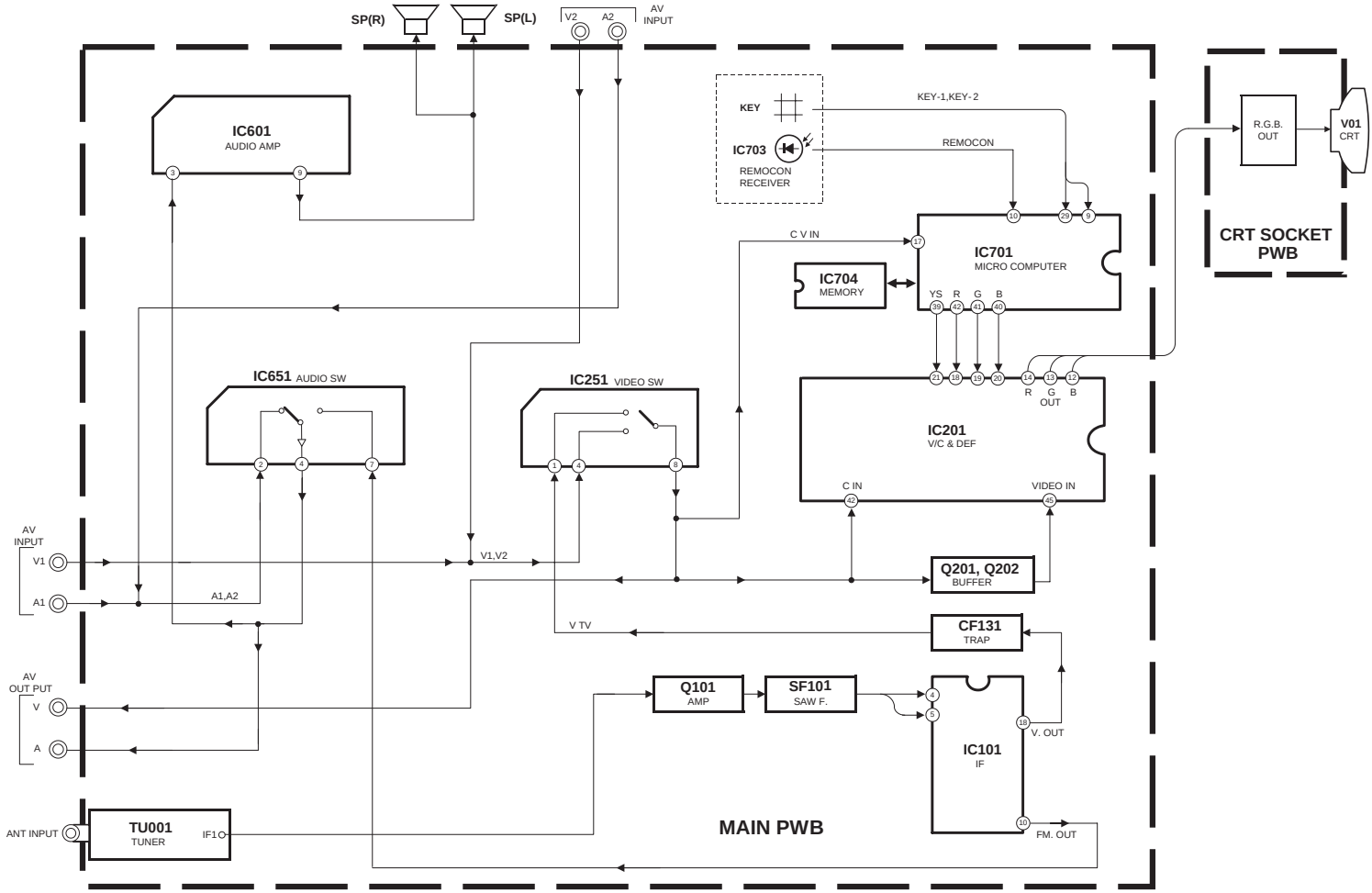
(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

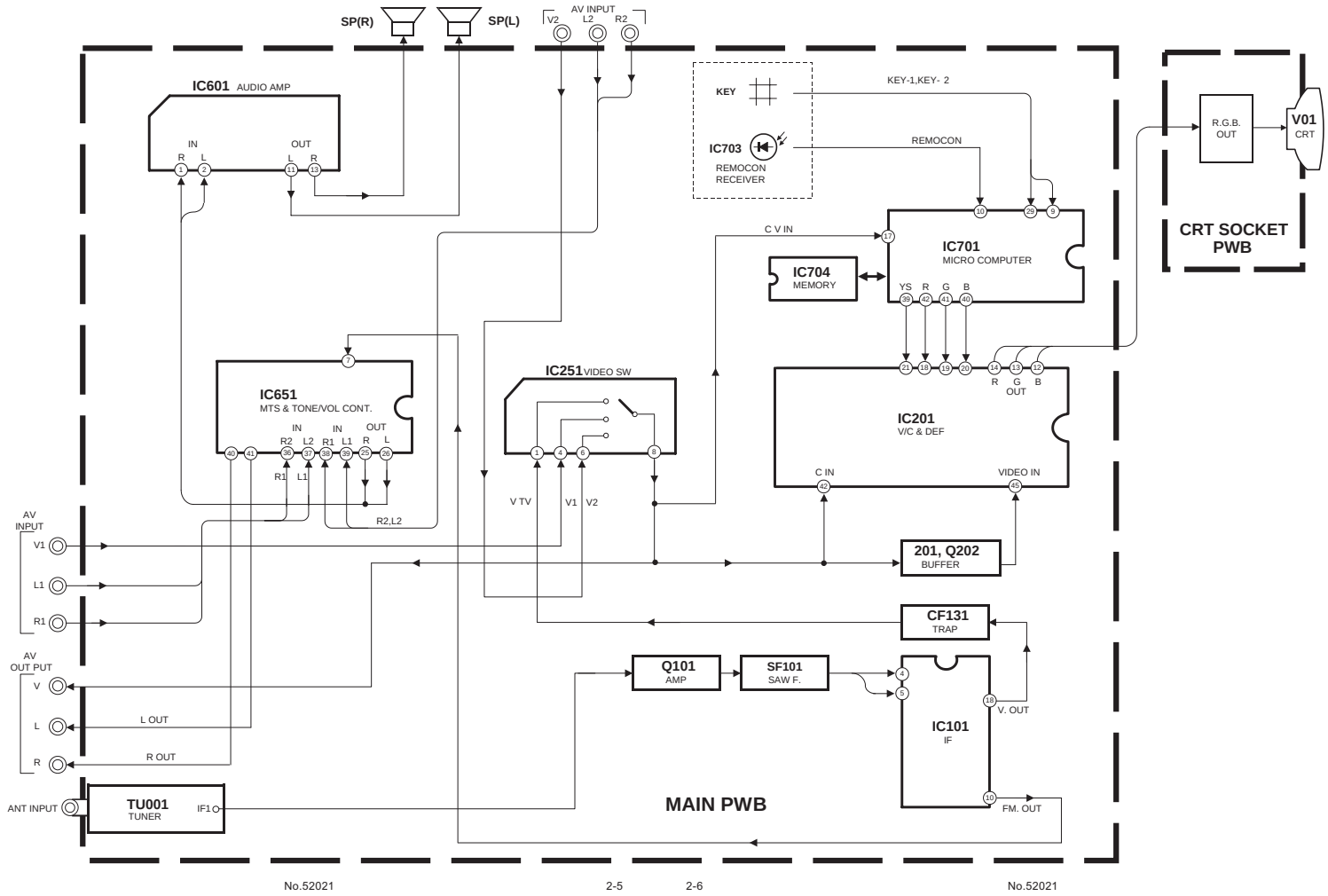
◇ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

BLOCK DIAGRAM [AV-14F13]



AV-14F33 AV-14F33

BLOCK DIAGRAM [AV-14F33]



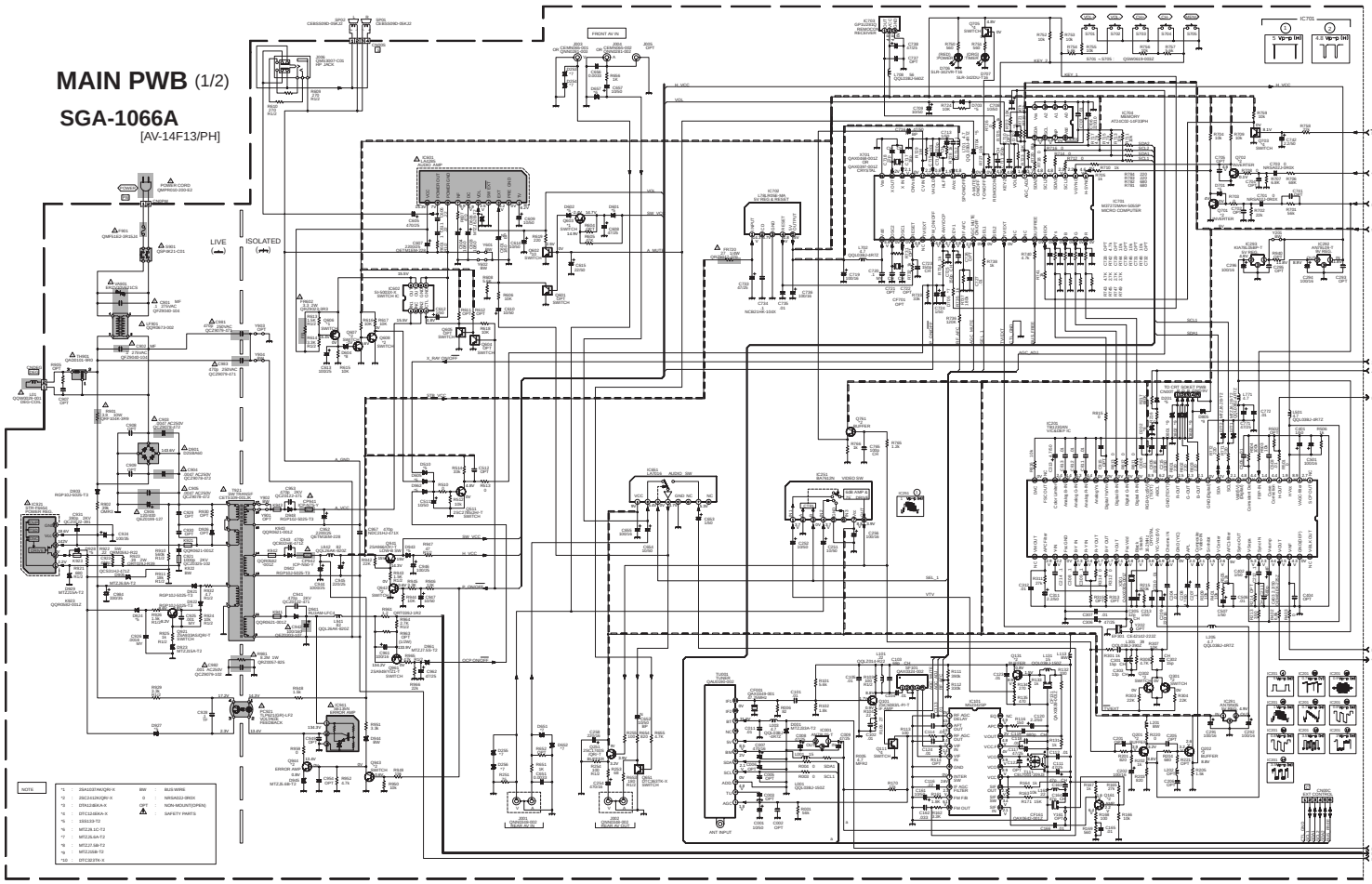
No.52021 2-5 2-6 No.52021

CIRCUIT DIAGRAMS *MAIN PWB CIRCUIT DIAGRAMS* [AV-14F13]

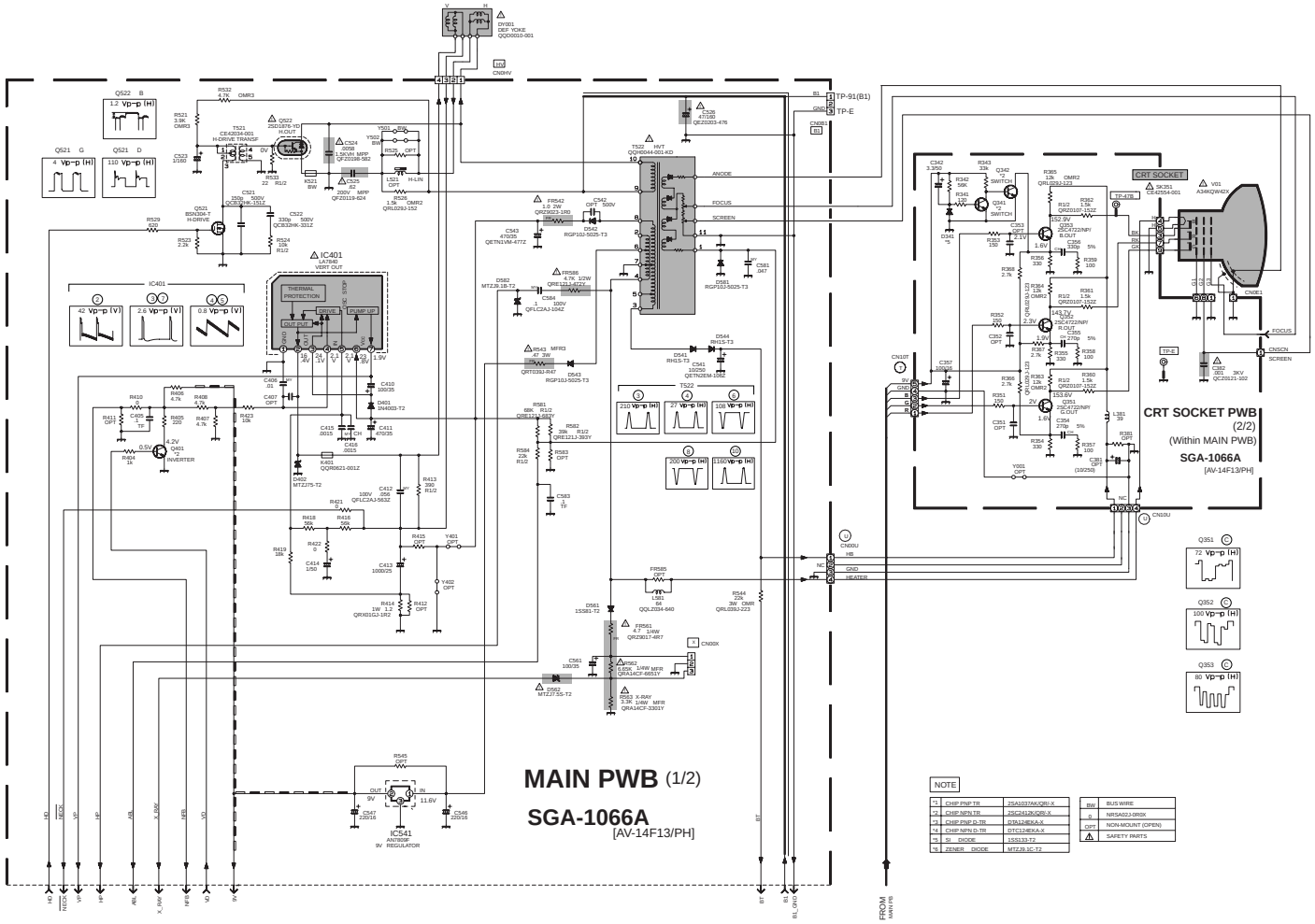
MAIN PWB (1/2)

SGA-1066A

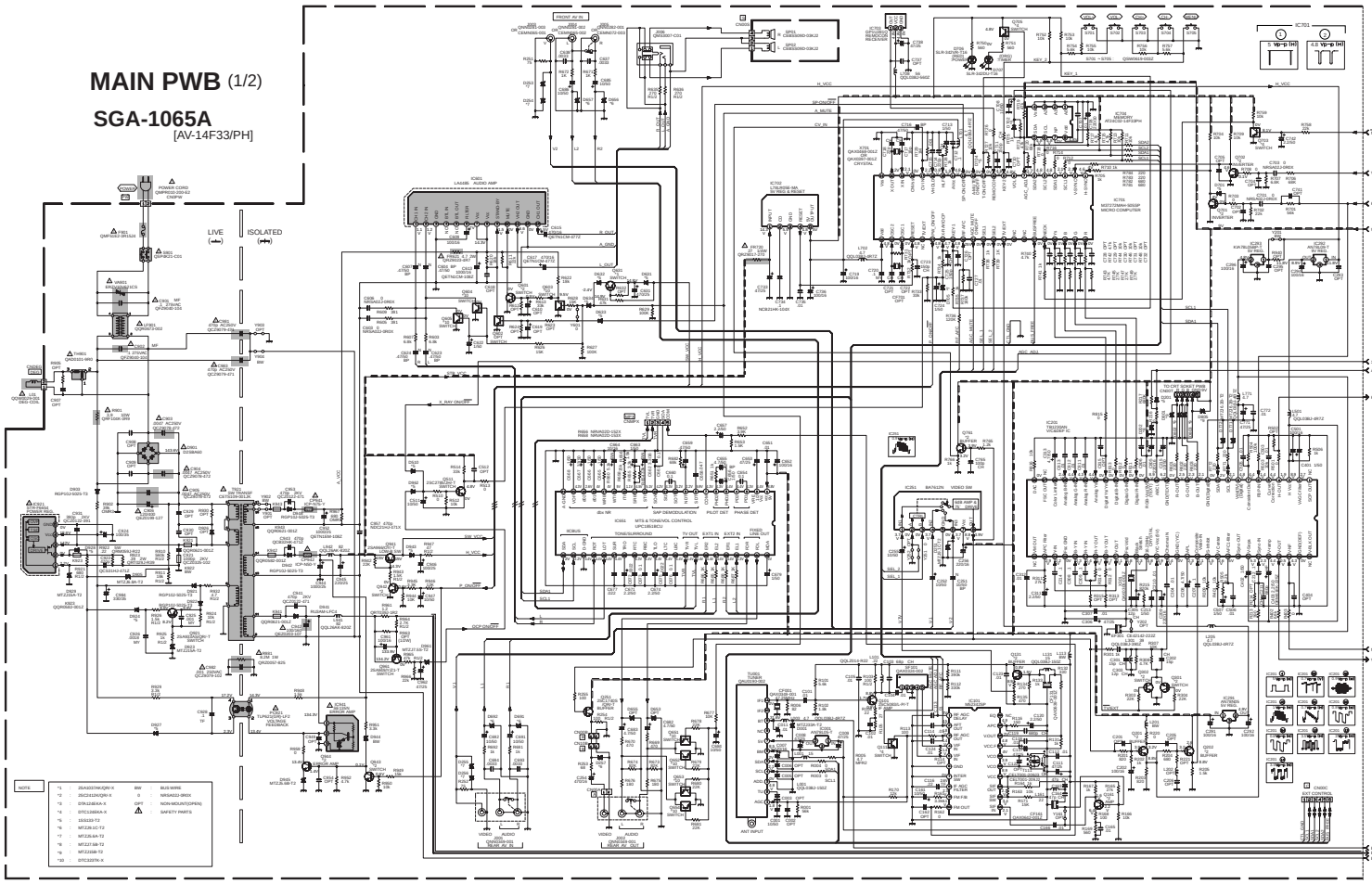
[AV-14F13/PH]



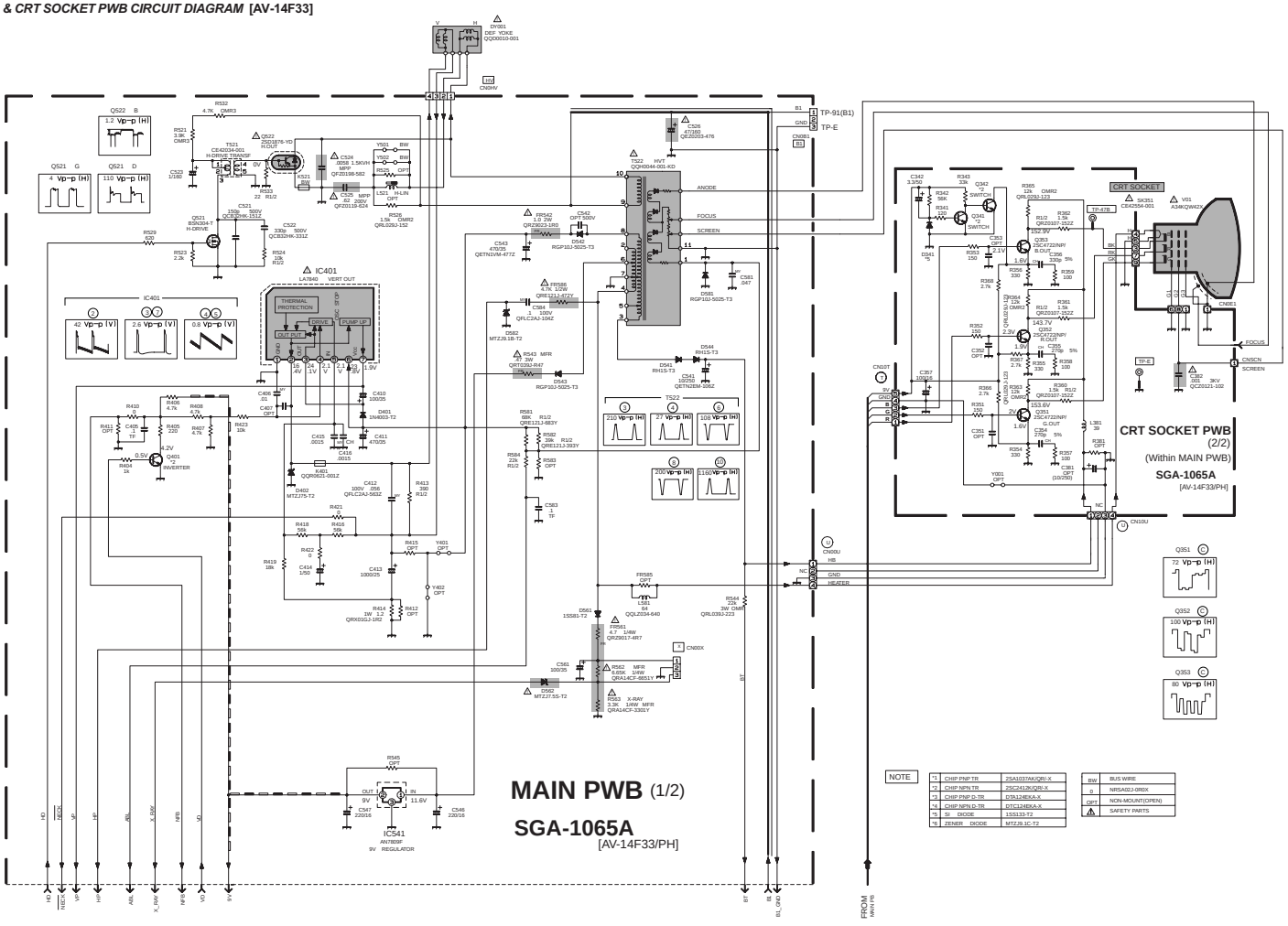
MAIN PWB & CRT SOCKET PWB CIRCUIT DIAGRAM **[AV-14F13]**



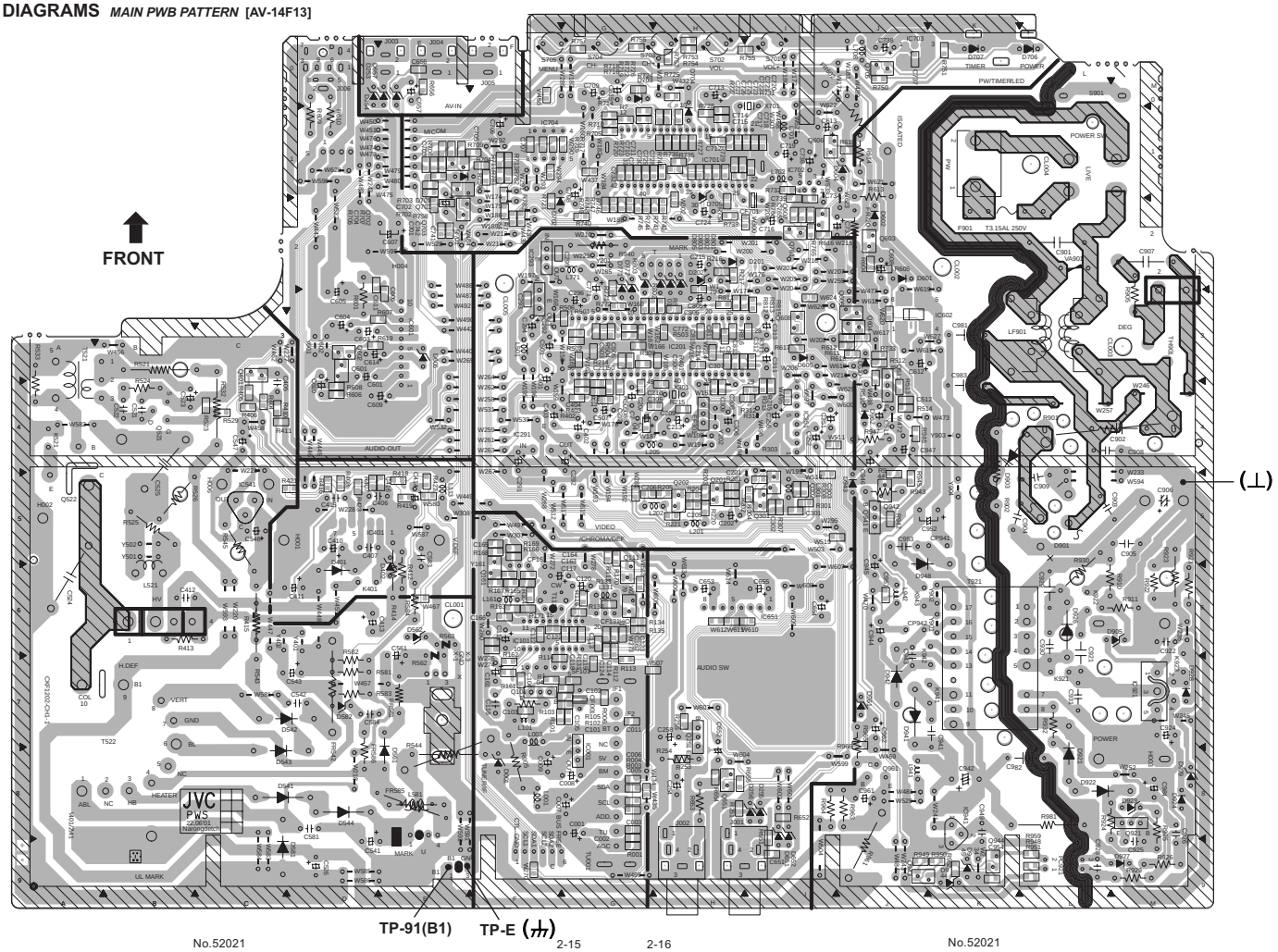
MAIN PWB CIRCUIT DIAGRAM **[AV-14F33]**



MAIN PWB & CRT SOCKET PWB CIRCUIT DIAGRAM **[AV-14F33]**



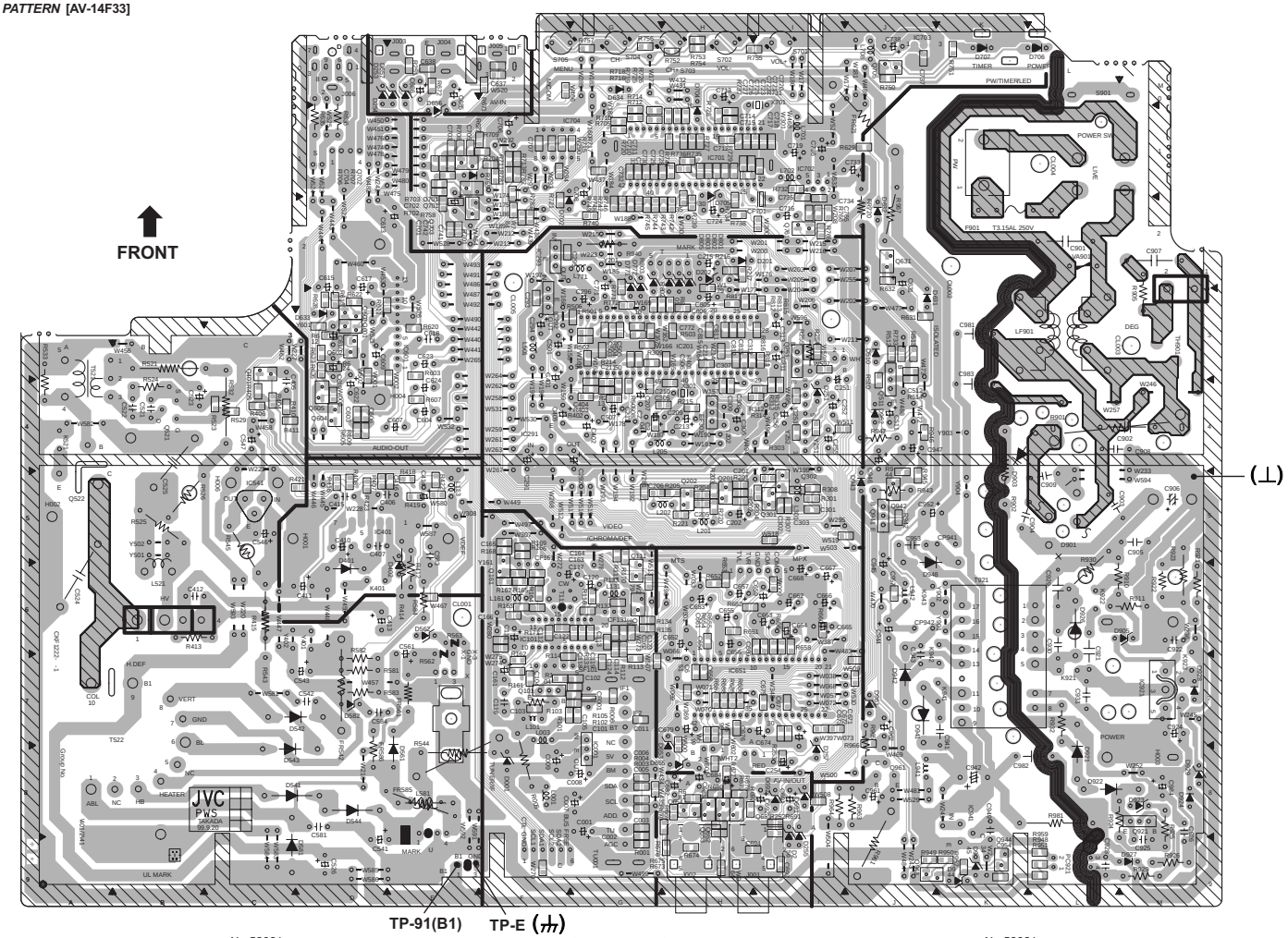
PATTERN DIAGRAMS *MAIN PWB PATTERN* [AV-14F13]



No.52021 2-15 2-16 No.52021

MAIN PWB PATTERN **[AV-14F33]**

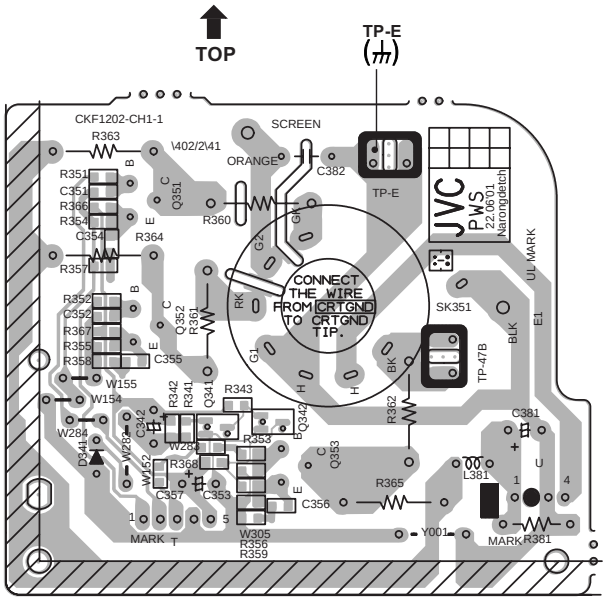
AV-14F33 AV-14F33



No.52021 2-17 2-18 No.52021

AV-14F13

CRT SOCKET PWB PATTERN **[AV-14F13]**

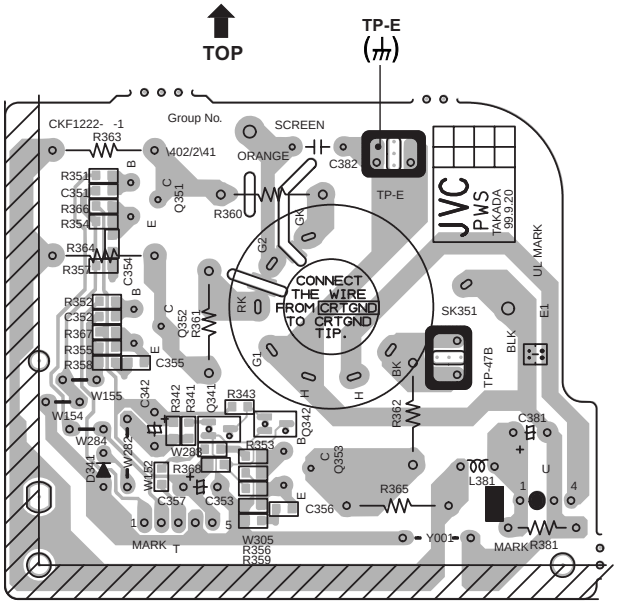


No.52021

2-19

AV-14F33

CRT SOCKET PWB PATTERN **[AV-14F33]**



2-20

No.52021

CHANNEL CHART

MODE TV	MODE CATV	BAND	CHANNEL DISP.	TUNER BAND
○	○	VL	02 03 04 05 06	Ⅰ
		VH	07 08 09 10 11 12 13	Ⅱ
×	○	MID	14 15	Ⅰ
			16 17 18 19 20 21 22	Ⅱ
		SUPER	23 24 25 26 27 28 29 Q 30 31 32 33 34 35 36	
		HYPER	37 38 39 40 41 42 43 44 45 46 47	
			48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64	Ⅳ
		ULTRA	65 66 67 68 69 70	

MODE TV	MODE CATV	BAND	CHANNEL DISP.	TUNER BAND
×	○	ULTRA	71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125	Ⅳ
		SUB MID	01 96 97 98 99	Ⅰ
○	×	UHF	14 ⟆ 69	Ⅳ

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

NOTE:
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.
SPECIAL ADAPTERS MAY BE REQUIRED.

VP0207
DP6060

JVC

VICTOR COMPANY OF JAPAN, LIMITED
HOME AV NETWORK BUSINESS UNIT. 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan

Printed in Japan
VP 0207
DP6060

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

CONTENTS

■ USING P.W. BOARD & REMOTE CONTROL UNIT ····· 34

[AV-14F13/PH]

■ EXPLODED VIEW PARTS LIST ····· 34
■ EXPLODED VIEW ····· 35
■ PRINTED WIRING BOARD PARTS LIST
● MAIN PW BOARD ASS'Y (SGA-1066A) (With CRT SOCKET PW BOARD) ····· 36
■ REMOTE CONTROL UNIT PARTS LIST ····· 46

[AV-14F33/PH]

■ EXPLODED VIEW PARTS LIST ····· 40
■ EXPLODED VIEW(1) ····· 40
■ EXPLODED VIEW(2) ····· 41
■ PRINTED WIRING BOARD PARTS LIST
● MAIN PW BOARD ASS'Y (SGA-1065A) (With CRT SOCKET PW BOARD) ····· 42
■ REMOTE CONTROL UNIT PARTS LIST ····· 46
■ PACKING / PACKING PARTS LIST ····· 47

USING P.W. BOARD & REMOTE CONTROL UNIT

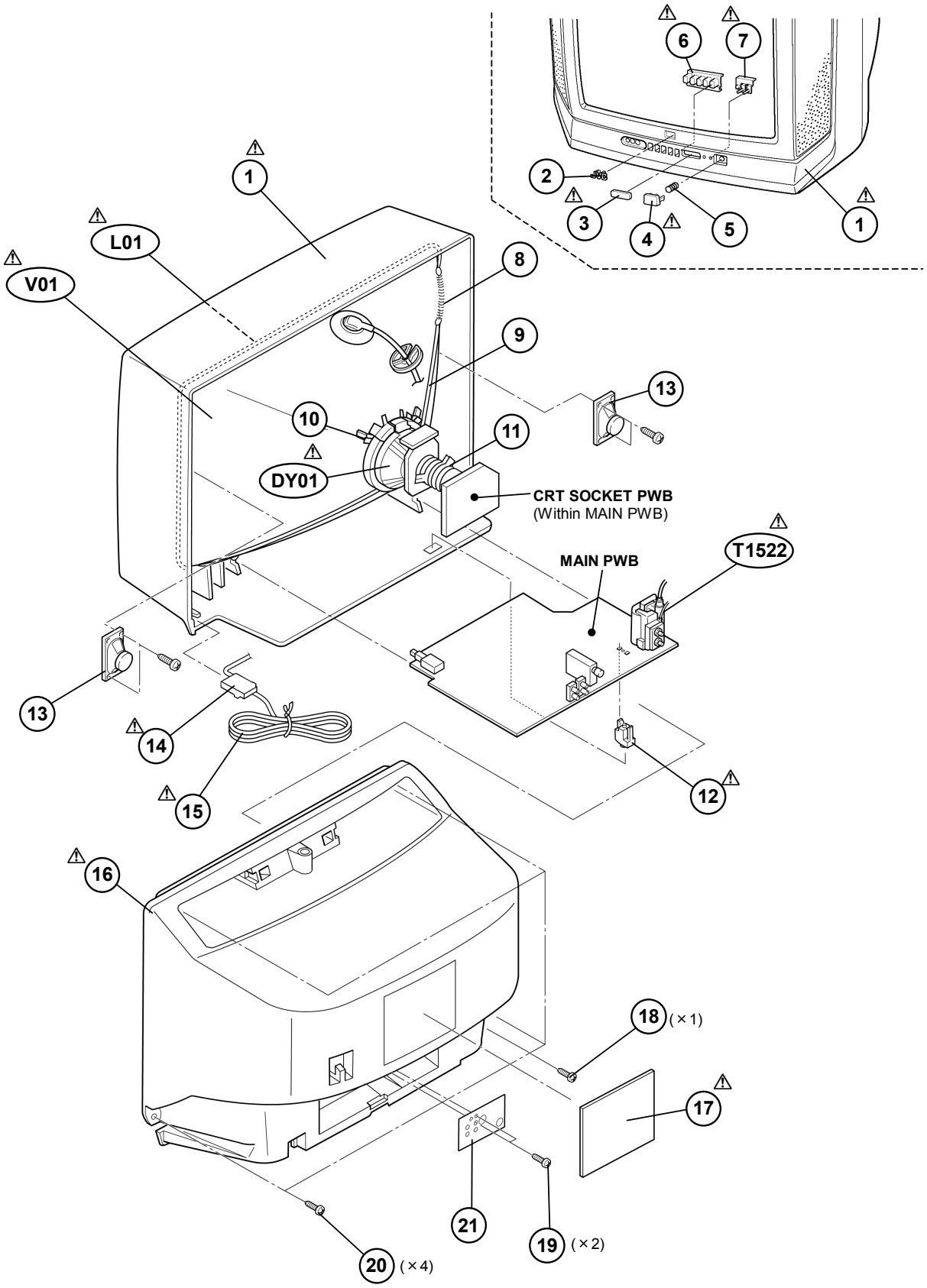
Model / P.W.B ASS'Y	**AV-14F13/PH**	**AV-14F33/PH**
MAIN P.W.B	SGA-1066A	SGA-1065A
REMOTE CONTROL UNIT	RM-C372GY-1H	RM-C373GY-1H

EXPLODED VIEW PARTS LIST

[AV-14F13/PH]

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	A34KQW42X	PICTURE TUBE	
⚠	L01	QQW0029-001	DEG COIL	
⚠	DY01	QQD0010-001	DEF YOKE	
⚠	T1522	QQH0044-001-KD	FBT	
⚠	1	LC10831-028A-H	FRONT CABINET	
	2	CM46880-002-H	JVC MARK	
⚠	3	LC30617-001C-H	E.E.WINDOW	
⚠	4	LC30616-004A-H	POWER KNOB	
	5	CM30861-069	SPRING	
⚠	6	LC20292-004A-H	CONTROL KNOB	
⚠	7	LC30618-001B-H	LED LENS	
	8	A48457-1	SPRING	
	9	CHGB0016-0A-N	BRAIDED ASSY	
	10	CE42153-00AJ1	WEDGE ASSY	(X3)
	11	CE40305-00B	PC MAGNET	
⚠	12	CM48144-002-H	PB STOPPER	
	13	CEBSS09D-05KJ2	SPEAKER	(X2)SP01
⚠	14	CM47005-A01-H	CORD CLAMP	
⚠	15	QMPR010-200-E2	POWER CORD	or QMPR010-200-K2
⚠	16	CM12961-A02-H	REAR COVER	
⚠	17	GG20024-001A-H	RATING LABEL	
	18	QYSBSBG4012M	TAP SCREW	(X1)
	19	QYSBSF3010Z	TAP SCREW	(X2)
	20	QYSBSFG4016Z	TAP SCREW	(X4)
	21	GG40021-002A-H	TERMINAL SHEET	

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

[AV-14F13/PH]

MAIN P.W. BOARD ASS'Y (SGA-1066A)

⚠	Symbol No.	Part No.	Part Name	Description	
	RESISTOR				
	R1001	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1003	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1004	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1005	QRT029J-4R7	MF R	4.7Ω 2W	J
	R1006	NRSA02J-820X	MG R	82Ω 1/10W	J
	R1101	NRSA02J-562X	MG R	5.6kΩ 1/10W	J
	R1102	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1103	QRE121J-101Y	C R	100Ω 1/2W	J
	R1104	NRSA02J-220X	MG R	22Ω 1/10W	J
	R1105	NRSA02J-270X	MG R	27Ω 1/10W	J
	R1111	NRSA02J-394X	MG R	390kΩ 1/10W	J
	R1112	NRSA02J-334X	MG R	330kΩ 1/10W	J
	R1113	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1116	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1131	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1132	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1133	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1134	NRSA02J-271X	MG R	270Ω 1/10W	J
	R1135	NRSA02J-471X	MG R	470Ω 1/10W	J
	R1161	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1162	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1163	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1164	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1165	NRSA02J-273X	MG R	27kΩ 1/10W	J
	R1166	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1167	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1168	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1169	NRSA02J-561X	MG R	560Ω 1/10W	J
	R1170	NRSA02J-123X	MG R	12kΩ 1/10W	J
	R1171	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1201	NRSA02J-821X	MG R	820Ω 1/10W	J
	R1202	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1203	NRSA02J-821X	MG R	820Ω 1/10W	J
	R1204	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1205	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1213	NRSA02J-391X	MG R	390Ω 1/10W	J
	R1215	NRSA02J-824X	MG R	820kΩ 1/10W	J
	R1216	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1217	NRSA02J-684X	MG R	680kΩ 1/10W	J
	R1220	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1251	NRSA02J-750X	MG R	75Ω 1/10W	J
	R1253	NRSA02J-680X	MG R	68Ω 1/10W	J
	R1254	QRE121J-101Y	C R	100Ω 1/2W	J
	R1255	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1301	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1303	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1304	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1307	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1308	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1309	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1311	NRSA02J-273X	MG R	27kΩ 1/10W	J
	R1312	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1314	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1341	NRSA02J-121X	MG R	120Ω 1/10W	J
	R1342	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1343	NRSA02J-333X	MG R	33kΩ 1/10W	J
	R1351	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1352	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1353	NRSA02J-151X	MG R	150Ω 1/10W	J
	R1354	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1355	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1356	NRSA02J-331X	MG R	330Ω 1/10W	J
	R1357	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1358	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1359	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1360	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
	R1361	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
	R1362	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
	R1363	QRL029J-123	OM R	12kΩ 2W	J
	R1364	QRL029J-123	OM R	12kΩ 2W	J
	R1365	QRL029J-123	OM R	12kΩ 2W	J
	R1366	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1367	NRSA02J-272X	MG R	2.7kΩ 1/10W	J

⚠	Symbol No.	Part No.	Part Name	Description	
	RESISTOR				
	R1368	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1401	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1402	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1403	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1404	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1405	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1406	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1407	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1408	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1410	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1413	QRE121J-391Y	C R	390Ω 1/2W	J
	R1414	QRX01GJ-1R2	MF R	1.2Ω 1W	J
	R1416	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1418	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1419	NRSA02J-183X	MG R	18kΩ 1/10W	J
	R1421	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1422	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1423	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1501	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1503	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1504	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1505	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1506	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1510	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1512	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1513	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1514	NRSA02J-333X	MG R	33kΩ 1/10W	J
	R1521	QRL039J-392	OM R	3.9kΩ 3W	J
	R1523	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1524	QRE121J-103Y	C R	10kΩ 1/2W	J
	R1526	QRL029J-152	OM R	1.5kΩ 2W	J
	R1529	NRSA02J-621X	MG R	620Ω 1/10W	J
	R1532	QRL039J-472	OM R	4.7kΩ 3W	J
	R1533	QRE121J-220Y	C R	22Ω 1/2W	J
⚠	R1543	QRT039J-R47	MF R	0.47Ω 3W	J
	R1544	QRL039J-223	OM R	22kΩ 3W	J
⚠	R1562	QRA14CF-6651Y	MF R	6.65kΩ 1/4W	F
⚠	R1563	QRA14CF-3301Y	MF R	3.3kΩ 1/4W	F
	R1581	QRE121J-683Y	C R	68kΩ 1/2W	J
	R1582	QRE121J-393Y	C R	39kΩ 1/2W	J
	R1584	QRE121J-223Y	C R	22kΩ 1/2W	J
	R1601	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
	R1605	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1606	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1607	NRSA02J-471X	MG R	470Ω 1/10W	J
	R1608	NRSA02J-562X	MG R	5.6kΩ 1/10W	J
	R1609	QRE121J-271Y	C R	270Ω 1/2W	J
	R1610	QRE121J-271Y	C R	270Ω 1/2W	J
	R1613	QRE121J-152Y	C R	1.5kΩ 1/2W	J
	R1614	QRE121J-332Y	C R	3.3kΩ 1/2W	J
	R1615	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1616	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1617	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1618	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1619	NRSA02J-221X	MG R	220Ω 1/10W	J
	R1651	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1653	QRE121J-181Y	C R	180Ω 1/2W	J
	R1654	NRSA02J-821X	MG R	820Ω 1/10W	J
	R1655	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1656	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1701	NRSA02J-563X	MG R	56kΩ 1/10W	J
	R1702	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1703	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1704	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1705	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1706	NRSA02J-683X	MG R	68kΩ 1/10W	J
	R1707	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1708	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1709	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1710	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1711	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1712	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1713	NRSA02J-103X	MG R	10kΩ 1/10W	J

[AV-14F13/PH]

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1714	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1715	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1716	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1717	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1718	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1719	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1720	NRSA02J-683X	MG R	68kΩ 1/10W J
	R1721	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1722	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1723	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1724	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1725	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1726	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1727	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1728	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1729	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1732	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1733	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1734	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1735	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1736	NRSA02J-124X	MG R	120kΩ 1/10W J
	R1737	NRSA02J-184X	MG R	180kΩ 1/10W J
	R1738	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1740	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1741	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1742	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1743	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1744	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1745	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1747	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1748	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1749	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1750	NRSA02J-561X	MG R	560Ω 1/10W J
	R1751	NRSA02J-561X	MG R	560Ω 1/10W J
	R1752	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1753	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1754	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1755	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1756	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1757	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1758	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1759	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1765	NRSA02J-122X	MG R	1.2kΩ 1/10W J
	R1766	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1771	NRSA02J-221X	MG R	220Ω 1/10W J
	R1772	NRSA02J-221X	MG R	220Ω 1/10W J
	R1781	NRSA02J-681X	MG R	680Ω 1/10W J
	R1782	NRSA02J-681X	MG R	680Ω 1/10W J
	R1783	NRSA02J-221X	MG R	220Ω 1/10W J
	R1784	NRSA02J-221X	MG R	220Ω 1/10W J
	R1801	NRSA02J-221X	MG R	220Ω 1/10W J
	R1802	NRSA02J-221X	MG R	220Ω 1/10W J
	R1803	NRSA02J-221X	MG R	220Ω 1/10W J
	R1811	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1812	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1813	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1815	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1816	NRSA02J-103X	MG R	10kΩ 1/10W J
⚠	R1901	QRF104K-3R9	UNF R	3.9Ω 10W K
	R1902	QRL039J-393	OM R	39kΩ 3W J
	R1910	QRE121J-564Y	C R	560kΩ 1/2W J
	R1911	QRE121J-183Y	C R	18kΩ 1/2W J
	R1921	QRE121J-681Y	C R	680Ω 1/2W J
	R1922	QRM059J-R22	MP R	0.22Ω 5W J
	R1923	QRT029J-R39	MF R	0.39Ω 2W J
	R1924	QRE121J-103Y	C R	10kΩ 1/2W J
	R1925	QRE121J-102Y	C R	1kΩ 1/2W J
	R1926	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R1929	QRE121J-332Y	C R	3.3kΩ 1/2W J
	R1932	QRE121J-4R7Y	C R	4.7Ω 1/2W J
	R1942	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1943	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R1944	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1945	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1946	NRSA02J-123X	MG R	12kΩ 1/10W J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1947	QRE121J-470Y	C R	47Ω 1/2W J
	R1948	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1949	NRSA02J-153X	MG R	15kΩ 1/10W J
	R1950	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1951	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1952	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1959	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1961	QRT039J-1R2	MF R	1.2Ω 3W J
	R1964	QRE121J-272Y	C R	2.7kΩ 1/2W J
	R1965	QRE121J-473Y	C R	47kΩ 1/2W J
	R1966	NRSA02J-223X	MG R	22kΩ 1/10W J
⚠	R1981	QRZ0057-825	C R	8.2MΩ 1W J
	CAPACITOR			
	C1001	QETN1HM-106Z	E CAP.	10µF 50V M
	C1007	QETN1CM-477Z	E CAP.	470µF 16V M
	C1008	QETN1EM-476Z	E CAP.	47µF 25V M
	C1009	QETN1EM-476Z	E CAP.	47µF 25V M
	C1011	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1101	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1102	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1103	NDC21HJ-680X	C CAP.	68pF 50V J
	C1104	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1105	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1111	QETN1EM-476Z	E CAP.	47µF 25V M
	C1112	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1113	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1114	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1116	QFV71HJ-224Z	MF CAP.	0.22µF 50V J
	C1117	QETN1EM-476Z	E CAP.	47µF 25V M
	C1118	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1119	NDC21HJ-681X	C CAP.	680pF 50V J
	C1120	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1123	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1124	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1161	QETN1HM-106Z	E CAP.	10µF 50V M
	C1162	NCB21HK-333X	C CAP.	0.033µF 50V K
	C1163	NDC21HJ-470X	C CAP.	47pF 50V J
	C1164	NDC21HJ-470X	C CAP.	47pF 50V J
	C1165	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1166	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1202	QETN1CM-107Z	E CAP.	100µF 16V M
	C1207	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1208	QETN1HM-475Z	E CAP.	4.7µF 50V M
	C1209	QETN1CM-227Z	E CAP.	220µF 16V M
	C1210	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1211	NDC21HJ-681X	C CAP.	680pF 50V J
	C1212	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1213	QETN1HM-105Z	E CAP.	1µF 50V M
	C1214	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1215	QETN1HM-106Z	E CAP.	10µF 50V M
	C1251	QETN1HM-106Z	E CAP.	10µF 50V M
	C1252	QETN1HM-106Z	E CAP.	10µF 50V M
	C1254	QETN1CM-477Z	E CAP.	470µF 16V M
	C1256	QETN1CM-107Z	E CAP.	100µF 16V M
	C1258	QETN1CM-227Z	E CAP.	220µF 16V M
	C1291	QETN1CM-107Z	E CAP.	100µF 16V M
	C1292	QETN1CM-107Z	E CAP.	100µF 16V M
	C1294	QETN1CM-107Z	E CAP.	100µF 16V M
	C1296	QETN1CM-107Z	E CAP.	100µF 16V M
	C1301	NDC21HJ-150X	C CAP.	15pF 50V J
	C1302	NDC21HJ-150X	C CAP.	15pF 50V J
	C1303	NDC21HJ-120X	C CAP.	12pF 50V J
	C1304	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1305	NDC21HJ-120X	C CAP.	12pF 50V J
	C1306	QETN1EM-476Z	E CAP.	47µF 25V M
	C1307	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1308	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1309	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1311	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1312	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1313	QETN1HM-475Z	E CAP.	4.7µF 50V M
	C1342	QETN1HM-335Z	E CAP.	3.3µF 50V M
	C1354	NDC21HJ-271X	C CAP.	270pF 50V J
	C1355	NDC21HJ-271X	C CAP.	270pF 50V J

[AV-14F13/PH]

⚠	Symbol No.	Part No.	Part Name	Description
		CAPACITOR		
	C1356	NDC21HJ-331X	C CAP.	330pF 50V J
	C1357	QETN1CM-107Z	E CAP.	100µF 16V M
⚠	C1382	QCZ0121-102	C CAP.	1000pF 3kV Z
	C1401	QETN1HM-105Z	E CAP.	1µF 50V M
	C1402	QETN1HM-105Z	E CAP.	1µF 50V M
	C1403	QEM61EK-225Z	E CAP.	2.2µF 25V K
	C1405	QFV71HJ-104Z	MF CAP.	0.1µF 50V J
	C1406	QFLC1HJ-103Z	M CAP.	0.01µF 50V J
	C1410	QETN1VM-107Z	E CAP.	100µF 35V M
	C1411	QETN1VM-477Z	E CAP.	470µF 35V M
	C1412	QFLC2AJ-563Z	M CAP.	0.056µF 100V J
	C1413	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1414	QETN1HM-105Z	E CAP.	1µF 50V M
	C1415	QFLC1HJ-152Z	M CAP.	1500pF 50V J
	C1416	NDC21HJ-152X	C CAP.	1500pF 50V J
	C1501	QETN1CM-107Z	E CAP.	100µF 16V M
	C1503	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1505	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1506	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1507	QETN1HM-105Z	E CAP.	1µF 50V M
	C1511	QETN1HM-106Z	E CAP.	10µF 50V M
	C1521	QCB32HK-151Z	C CAP.	150pF 500V K
	C1522	QCB32HK-331Z	C CAP.	330pF 500V K
	C1523	QETN2CM-105Z	E CAP.	1µF 160V M
⚠	C1524	QFZ0198-582	MPP CAP.	0.0058µF 1.5kVH±3%
⚠	C1525	QFZ0119-624	MPP CAP.	0.62µF 200V±3%
⚠	C1526	QEZ0203-476	E CAP.	47µF 160V M
	C1541	QETN2EM-106Z	E CAP.	10µF 250V M
	C1543	QETN1VM-477Z	E CAP.	470µF 35V M
	C1546	QETN1CM-227Z	E CAP.	220µF 16V M
	C1547	QETN1CM-227Z	E CAP.	220µF 16V M
	C1561	QETN1VM-107Z	E CAP.	100µF 35V M
	C1581	QFLC1HJ-473Z	M CAP.	0.047µF 50V J
	C1583	QFV71HJ-104Z	MF CAP.	0.1µF 50V J
	C1584	QFLC2AJ-104Z	M CAP.	0.1µF 100V J
	C1601	QENC1HM-105Z	E CAP.	1µF 50V M
	C1603	QETN1HM-106Z	E CAP.	10µF 50V M
	C1604	QETN1HM-106Z	E CAP.	10µF 50V M
	C1605	QETN1EM-477Z	E CAP.	470µF 25V M
	C1606	NCB21EK-224X	C CAP.	0.22µF 50V K
	C1607	QETM1EM-228	E CAP.	2200µF 25V M
	C1608	QETN1EM-476Z	E CAP.	47µF 25V M
	C1609	QETN1HM-106Z	E CAP.	10µF 50V M
	C1610	QETN1HM-106Z	E CAP.	10µF 50V M
	C1611	NCB21EK-224X	C CAP.	0.22µF 50V K
	C1612	QETN1HM-105Z	E CAP.	1µF 50V M
	C1613	QETN1EM-107Z	E CAP.	100µF 25V M
	C1614	QETN1HM-106Z	E CAP.	10µF 50V M
	C1615	QETN1HM-226Z	E CAP.	22µF 50V M
	C1651	NCB21HK-332X	C CAP.	3300pF 50V K
	C1652	QENC1HM-106Z	BP E CAP.	10µF 50V M
	C1653	QETN1HM-105Z	E CAP.	1µF 50V M
	C1654	QETN1HM-106Z	E CAP.	10µF 50V M
	C1655	QETN1CM-107Z	E CAP.	100µF 16V M
	C1656	NCB21HK-332X	C CAP.	3300pF 50V K
	C1657	QETN1HM-106Z	E CAP.	10µF 50V M
	C1701	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1703	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1706	QETN1AM-227Z	E CAP.	220µF 10V M
	C1707	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1708	QETN1HM-106Z	E CAP.	10µF 50V M
	C1709	QETN1HM-106Z	E CAP.	10µF 50V M
	C1711	NDC21HJ-151X	C CAP.	150pF 50V J
	C1712	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1713	QETN1HM-105Z	E CAP.	1µF 50V M
	C1714	NDC21HJ-221X	C CAP.	220pF 50V J
	C1715	NCB21HK-102X	C CAP.	1000pF 50V K
	C1716	QENC1HM-474Z	E CAP.	0.47µF 50V M
	C1717	NDC21HJ-180X	C CAP.	18pF 50V J
	C1718	NDC21HJ-220X	C CAP.	22pF 50V J
	C1719	QETN1CM-107Z	E CAP.	100µF 16V M
	C1720	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1723	NDC21HJ-151X	C CAP.	150pF 50V J
	C1724	QETN1HM-105Z	E CAP.	1µF 50V M
	C1725	NDC21HJ-151X	C CAP.	150pF 50V J
	C1727	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1733	QETN1EM-476Z	E CAP.	47µF 25V M
	C1734	NCB21HK-104X	C CAP.	0.1µF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
		CAPACITOR		
	C1735	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1736	QETN1CM-107Z	E CAP.	100µF 16V M
	C1738	QETN1EM-476Z	E CAP.	47µF 25V M
	C1742	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1765	NDC21HJ-101X	C CAP.	100pF 50V J
	C1771	QETN1EM-476Z	E CAP.	47µF 25V M
	C1772	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1805	QETN1CM-227Z	E CAP.	220µF 16V M
	C1806	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1811	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1812	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1813	NCB21HK-103X	C CAP.	0.01µF 50V K
⚠	C1901	QFZ9040-104	MF CAP.	0.1µFAC275V M
⚠	C1902	QFZ9040-104	MF CAP.	0.1µFAC275V M
⚠	C1903	QCZ9078-472	C CAP.	4700pFAC250V M
⚠	C1904	QCZ9078-472	C CAP.	4700pFAC250V M
⚠	C1905	QCZ9078-472	C CAP.	4700pFAC250V M
⚠	C1906	QEZ0199-127	E CAP.	120µF 400V M
	C1921	QCZ0325-102	C CAP.	1000pF 2kV K
	C1922	QCS31HJ-471Z	C CAP.	470pF 50V J
	C1924	QETN1VM-107Z	E CAP.	100µF 35V M
	C1925	QFLC1HJ-102Z	M CAP.	1000pF 50V J
	C1926	QFLC1HJ-182Z	M CAP.	1800pF 50V J
	C1928	QFV71HJ-104Z	MF CAP.	0.1µF 50V J
	C1931	QCZ0122-391	C CAP.	390pF 2kV K
	C1941	QCZ0122-471	C CAP.	470pF 2kV K
⚠	C1942	QEZ0203-107	E CAP.	100µF 160V M
	C1943	QCB32HK-471Z	C CAP.	470pF 500V K
	C1944	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1945	QETN1EM-227Z	E CAP.	220µF 25V M
	C1946	QETN1EM-107Z	E CAP.	100µF 25V M
	C1947	QETN1HM-106Z	E CAP.	10µF 50V M
	C1952	QETM1EM-228	E CAP.	2200µF 25V M
	C1953	QCZ0122-471	C CAP.	470pF 2kV K
	C1957	NDC21HJ-471X	C CAP.	470pF 50V J
	C1961	QETN1CM-107Z	E CAP.	100µF 16V M
	C1962	QETN1EM-476Z	E CAP.	47µF 25V M
⚠	C1981	QCZ9079-471	C CAP.	470pFAC250V K
⚠	C1982	QCZ9079-102	C CAP.	1000pFAC250V M
⚠	C1983	QCZ9079-471	C CAP.	470pFAC250V K
	C1984	QETN1VM-337Z	E CAP.	330µF 35V M
		TRANSFORMER		
	T1111	CELT001-209J3	CW TRANSF	or CELT001-209J2
	T1521	CE42034-001	HOR DRIVE TRANS	
⚠	T1522	QQH0044-001-KD	FBT	
⚠	T1921	CETS109-001JK	SW TRANSF.	
		COIL		
	L1001	QQL03BJ-150Z	COIL	15µH J
	L1003	QQL03BJ-4R7Z	COIL	4.7µH J
	L1101	QQLZ014-R22	INDUCTOR	
	L1131	QQL03BJ-150Z	COIL	15µH J
	L1161	QQL03BJ-220Z	COIL	22µH J
	L1205	QQL03BJ-4R7Z	COIL	4.7µH J
	L1301	QQL03BJ-390Z	COIL	39µH J
	L1381	QQL03BJ-390Z	COIL	39µH J
	L1501	QQL03BJ-4R7Z	COIL	4.7µH J
	L1581	QQLZ034-640	INDUCTOR	
	L1701	QQL03BJ-4R7Z	COIL	4.7µH J
	L1702	QQL03BJ-4R7Z	COIL	4.7µH J
	L1708	QQL03BJ-560Z	COIL	56µH J
	L1771	QQL03BJ-4R7Z	COIL	4.7µH J
	L1941	QQL26AK-820Z	COIL	82µH K
	L1942	QQL26AK-820Z	COIL	82µH K
		DIODE		
	D1001	MTZJ33A-T2	ZENER DIODE	
	D1201	1SS133-T2	SI.DIODE	
	D1202	MTZJ7.5B-T2	ZENER DIODE	
	D1253	MTZJ5.6A-T2	ZENER DIODE	
	D1254	MTZJ5.6A-T2	ZENER DIODE	
	D1255	MTZJ5.6A-T2	ZENER DIODE	
	D1256	MTZJ5.6A-T2	ZENER DIODE	

[AV-14F13/PH]

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1341	1SS133-T2	SI.DIODE	
	D1401	1N4003-T2	SI.DIODE	
	D1402	MTZJ75-T2	ZENER DIODE	
	D1510	1SS133-T2	SI.DIODE	
	D1541	RH1S-T3	SI.DIODE	
	D1542	RGP10J-5025-T3	SI.DIODE	
	D1543	RGP10J-5025-T3	SI.DIODE	
	D1544	RH1S-T3	SI.DIODE	
	D1561	1SS81-T2	SI.DIODE	
⚠	D1562	MTZJ7.5S-T2	ZENER DIODE	
	D1581	RGP10J-5025-T3	SI.DIODE	
	D1582	MTZJ9.1B-T2	ZENER DIODE	
	D1601	1SS133-T2	SI.DIODE	
	D1602	1SS133-T2	SI.DIODE	
	D1604	MTZJ7.5B-T2	ZENER DIODE	
	D1605	1SS133-T2	SI.DIODE	
	D1606	MTZJ6.2B-T2	ZENER DIODE	
	D1651	MTZJ5.6A-T2	ZENER DIODE	
	D1652	MTZJ5.6A-T2	ZENER DIODE	
	D1657	MTZJ9.1C-T2	ZENER DIODE	
	D1701	1SS133-T2	SI.DIODE	
	D1702	1SS133-T2	SI.DIODE	
	D1703	1SS133-T2	SI.DIODE	
	D1704	1SS133-T2	SI.DIODE	
	D1705	MTZJ5.6A-T2	ZENER DIODE	
	D1706	SLR-342VR-T16	LED	
	D1707	SLR-342DU-T16	LED	
	D1771	MTZJ6.2B-T2	ZENER DIODE	
	D1772	MTZJ6.2B-T2	ZENER DIODE	
	D1801	MTZJ15B-T2	ZENER DIODE	
	D1802	MTZJ15B-T2	ZENER DIODE	
	D1803	MTZJ15B-T2	ZENER DIODE	
	D1805	MTZJ15B-T2	ZENER DIODE	
⚠	D1901	D2SBA60	BRIDGE DIODE	
	D1903	RGP10J-5025-T3	SI.DIODE	
	D1905	MTZJ6.8A-T2	ZENER DIODE	
	D1921	RGP10J-5025-T3	SI.DIODE	
	D1922	RGP10J-5025-T3	SI.DIODE	
	D1923	MTZJ15A-T2	ZENER DIODE	
	D1924	1SS133-T2	SI.DIODE	
	D1927	1SS133-T2	SI.DIODE	
	D1928	1SS133-T2	SI.DIODE	
	D1929	MTZJ15A-T2	ZENER DIODE	
	D1941	RU3AM-LFC4	SI.DIODE	
	D1942	RGP10J-5025-T3	SI.DIODE	
	D1943	1SS133-T2	SI.DIODE	
	D1945	MTZJ5.6B-T2	ZENER DIODE	
	D1948	RGP10J-5025-T3	SI.DIODE	
	D1961	MTZJ7.5S-T2	ZENER DIODE	
	D1962	1SS133-T2	SI.DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q1101	2SC5083/L-P/-T	SI.TRANSISTOR	
	Q1111	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1131	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1161	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1201	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1202	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1251	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q1301	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1302	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1341	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1342	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1351	2SC4722/NP/	SI.TRANSISTOR	
	Q1352	2SC4722/NP/	SI.TRANSISTOR	
	Q1353	2SC4722/NP/	SI.TRANSISTOR	
	Q1401	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1511	2SC2785/JH/-T	SI TRANSISTOR	
	Q1521	BSN304-T	MOS FET	
⚠	Q1522	2SD1876-YD	POWER TRANSISTOR	H.OUT
	Q1602	DTC323TK-X	DIGI.TRANSISTOR	
	Q1603	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1606	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1607	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1608	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1651	DTC363TK-X	DIGI.TRANSISTOR	
	Q1701	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1702	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1703	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1705	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1761	2SC2412K/QR/-X	SI.TRANSISTOR	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q1921	2SA933AS/QR/-T	SI.TRANSISTOR	
	Q1941	2SA966/OY/-T	SI.TRANSISTOR	
	Q1942	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1943	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1944	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1961	2SA949/Y/Z1-T	SI.TRANSISTOR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC1001	AN78L05-T	I C	
	IC1101	M52342SP	I C	
	IC1201	TB1230AN	I C	
	IC1251	BA7612N	I C	
	IC1291	AN78N05	I C	
	IC1292	AN78L09-T	I C	
	IC1293	KIA78L05BP-T	I C	
⚠	IC1401	LA7840	I C	
	IC1541	AN7809F	I C	
⚠	IC1601	LA4285	I C	
	IC1602	SI-5003X-X	I C	
	IC1651	LA7016	I C	
	IC1701	M37272MAH-505SP	I C(MCU)	
	IC1702	L78LR05E-MA	I C	
	IC1703	GP1U281Q	IR DETECT UNIT	
	IC1704	AT24C02-14F33PH	I C	(SERVICE)
⚠	IC1921	STR-F6654	I C(HYBRID)	
⚠	IC1941	SE135N	I C	

OTHERS

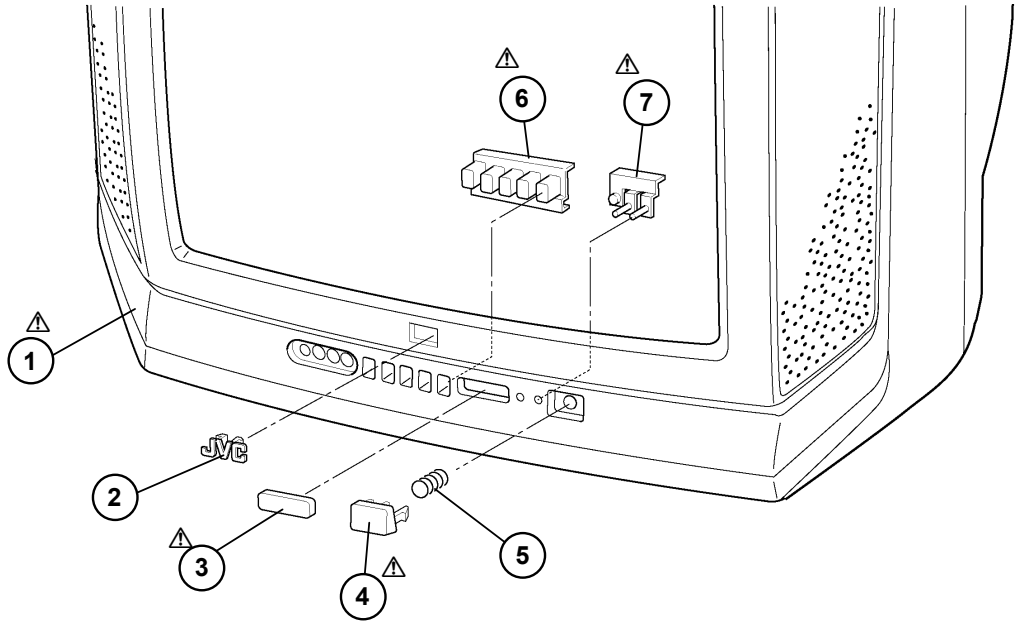
⚠	Symbol No.	Part No.	Part Name	Description
		LC30114-001C-H	LED HOLDER	
	CF1001	QAX0349-001	C TRAP	
	CF1131	QAX0639-001Z	C TRAP	
	CF1161	QAX0642-001Z	C FILTER	
⚠	CP1941	ICP-N75-Y	I.C.PROTECT	
⚠	CP1942	ICP-N50-Y	I.C.PROTECT	
	EF1301	CE42142-222Z	EMI FILTER	
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A
	FC1901	CEMG002-001Z	FUSE CLIP	
	FC1902	CEMG002-001Z	FUSE CLIP	
⚠	FR1542	QRZ9023-1R0	F R	1.0 Ω 2W J
⚠	FR1561	QRZ9017-4R7	F R	4.7 Ω 1/4W J
⚠	FR1586	QRE121J-472Y	C R	4.7kΩ 1/2W J
⚠	FR1602	QRZ9023-3R3	FUSI RESISTOR	3.3 Ω 2W J
⚠	FR1720	QRZ9017-270	F R	27 Ω 1/4W J
	J1001	QNN0348-002	PIN JACK	
	J1002	QNN0348-002	PIN JACK	
	J1003	CEMN065-001	PIN JACK	or QNN0281-003
	J1004	CEMN065-002	PIN JACK	or QNN0281-002
	J1006	QMS3007-C01	3.5 JACK	
	K1401	QQR0621-001Z	FERRITE BEADS	
	K1921	QQR0621-001Z	FERRITE BEADS	
	K1923	QQR0582-001Z	FERRITE BEADS	
	K1941	QQR0621-001Z	FERRITE BEADS	
	K1942	QQR0582-001Z	FERRITE BEADS	
	K1943	QQR0621-001Z	FERRITE BEADS	
⚠	LF1901	QQR0673-002	LINE FILTER	
⚠	PC1921	TLP621(GR)-LF2	PHOTO COUPLER	
	S1701	QSW0619-003Z	TACT SWITCH	VOL+
	S1702	QSW0619-003Z	TACT SWITCH	VOL-
	S1703	QSW0619-003Z	TACT SWITCH	CH+
	S1704	QSW0619-003Z	TACT SWITCH	CH-
	S1705	QSW0619-003Z	TACT SWITCH	MENU
⚠	S1901	QSP4K21-C01	PUSH SWITCH	POWER SW
	SF1101	QAX0324-002	SAW FILTER	
⚠	SK1351	CE42554-001	C R T SOCKET	
⚠	TH1901	QAD0101-9R0	THERMISTOR	
	TU1001	QAU0190-002	TUNER	
⚠	VA1901	ERZV10V621CS	VARISTOR	
	X1301	QAX0305-001Z	CRYSTAL	
	X1701	QAX0468-001Z	CRYSTAL	or QAX0397-001Z

EXPLODED VIEW PARTS LIST

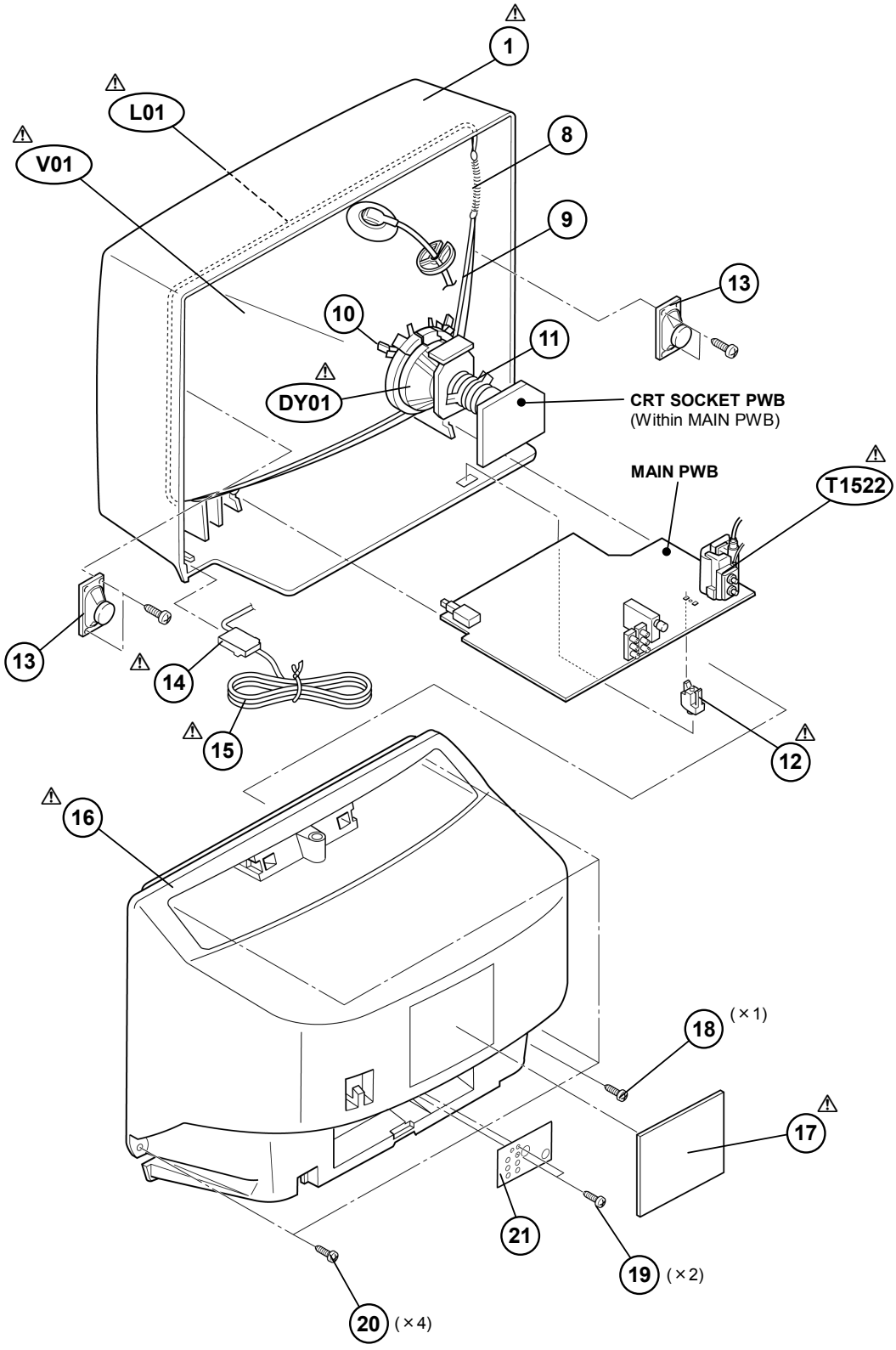
[AV-14F33/PH]

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	A34KQW42X	PICTURE TUBE	
⚠	L01	QQW0029-001	DEG COIL	
⚠	DY01	QQD0010-001	DEF YOKE	
⚠	T1522	QQH0044-001-KD	FBT	
⚠	1	LC10831-027A-H	FRONT CABINET	
	2	CM46880-002-H	JVC MARK	
⚠	3	LC30617-001C-H	E.E.WINDOW	
⚠	4	LC30616-004A-H	POWER KNOB	
	5	CM30861-069	SPRING	
⚠	6	LC20292-004A-H	CONTROL KNOB	
⚠	7	LC30618-001B-H	LED LENS	
	8	A48457-1	SPRING	
	9	CHGB0016-0A-N	BRAIDED ASSY	
	10	CE42153-00AJ1	WEDGE ASSY	(X3)
	11	CE40305-00B	PC MAGNET	
⚠	12	CM48144-002-H	PB STOPPER	
	13	CEBSS09D-03KJ2	SPEAKER	(X2)SP01
⚠	14	CM47005-A01-H	CORD CLAMP	
⚠	15	QMPR010-200-E2	POWER CORD	or QMPR010-200-K2
⚠	16	CM12961-A02-H	REAR COVER	
⚠	17	GG20024-001A-H	RATING LABEL	
	18	QYSBSBG4012M	TAP SCREW	(X1)
	19	QYSBSF3010Z	TAP SCREW	(X2)
	20	QYSBSFG4016Z	TAP SCREW	(X4)
	21	GG40021-001A-H	TERMINAL SHEET	

EXPLODED VIEW(1)



EXPLODED VIEW(2)



PRINTED WIRING BOARD PARTS LIST

[AV-14F33/PH]

MAIN PW BOARD ASS'Y (SGA-1065A)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1001	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1003	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1004	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1005	QRT029J-4R7	MF R	4.7Ω 2W J
	R1006	NRSA02J-820X	MG R	82Ω 1/10W J
	R1101	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1102	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1103	QRE121J-101Y	C R	100Ω 1/2W J
	R1104	NRSA02J-220X	MG R	22Ω 1/10W J
	R1105	NRSA02J-270X	MG R	27Ω 1/10W J
	R1111	NRSA02J-394X	MG R	390kΩ 1/10W J
	R1112	NRSA02J-334X	MG R	330kΩ 1/10W J
	R1113	NRSA02J-101X	MG R	100Ω 1/10W J
	R1116	NRSA02J-151X	MG R	150Ω 1/10W J
	R1131	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1132	NRSA02J-331X	MG R	330Ω 1/10W J
	R1133	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1134	NRSA02J-271X	MG R	270Ω 1/10W J
	R1135	NRSA02J-471X	MG R	470Ω 1/10W J
	R1161	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1162	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1163	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1164	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1165	NRSA02J-273X	MG R	27kΩ 1/10W J
	R1166	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1167	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1168	NRSA02J-101X	MG R	100Ω 1/10W J
	R1169	NRSA02J-561X	MG R	560Ω 1/10W J
	R1170	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1171	NRSA02J-153X	MG R	15kΩ 1/10W J
	R1201	NRSA02J-821X	MG R	820Ω 1/10W J
	R1202	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1203	NRSA02J-821X	MG R	820Ω 1/10W J
	R1204	NRSA02J-681X	MG R	680Ω 1/10W J
	R1205	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1213	NRSA02J-391X	MG R	390Ω 1/10W J
	R1215	NRSA02J-824X	MG R	820kΩ 1/10W J
	R1216	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1217	NRSA02J-684X	MG R	680kΩ 1/10W J
	R1220	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1251	NRSA02J-750X	MG R	75Ω 1/10W J
	R1252	NRSA02J-750X	MG R	75Ω 1/10W J
	R1253	NRSA02J-680X	MG R	68Ω 1/10W J
	R1254	QRE121J-101Y	C R	100Ω 1/2W J
	R1255	NRSA02J-101X	MG R	100Ω 1/10W J
	R1301	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1303	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1304	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1307	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1308	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1309	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1311	NRSA02J-273X	MG R	27kΩ 1/10W J
	R1312	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1314	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1341	NRSA02J-121X	MG R	120Ω 1/10W J
	R1342	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1343	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1351	NRSA02J-151X	MG R	150Ω 1/10W J
	R1352	NRSA02J-151X	MG R	150Ω 1/10W J
	R1353	NRSA02J-151X	MG R	150Ω 1/10W J
	R1354	NRSA02J-331X	MG R	330Ω 1/10W J
	R1355	NRSA02J-331X	MG R	330Ω 1/10W J
	R1356	NRSA02J-331X	MG R	330Ω 1/10W J
	R1357	NRSA02J-101X	MG R	100Ω 1/10W J
	R1358	NRSA02J-101X	MG R	100Ω 1/10W J
	R1359	NRSA02J-101X	MG R	100Ω 1/10W J
	R1360	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1361	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1362	QRZ0107-152Z	C R	1.5kΩ 1/2W K
	R1363	QRL029J-123	OM R	12kΩ 2W J
	R1364	QRL029J-123	OM R	12kΩ 2W J
	R1365	QRL029J-123	OM R	12kΩ 2W J
	R1366	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1367	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1368	NRSA02J-272X	MG R	2.7kΩ 1/10W J

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1401	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1402	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1403	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1404	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1405	NRSA02J-221X	MG R	220Ω 1/10W J
	R1406	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1407	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1408	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1410	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1413	QRE121J-391Y	C R	390Ω 1/2W J
	R1414	QRX01GJ-1R2	MF R	1.2Ω 1W J
	R1416	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1418	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1419	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1421	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1422	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1423	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1501	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1503	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1504	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1505	NRSA02J-822X	MG R	8.2kΩ 1/10W J
	R1506	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1510	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1512	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1513	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1514	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1521	QRL039J-392	OM R	3.9kΩ 3W J
	R1523	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1524	QRE121J-103Y	C R	10kΩ 1/2W J
	R1526	QRL029J-152	OM R	1.5kΩ 2W J
	R1529	NRSA02J-621X	MG R	620Ω 1/10W J
	R1532	QRL039J-472	OM R	4.7kΩ 3W J
	R1533	QRE121J-220Y	C R	22Ω 1/2W J
⚠	R1543	QRT039J-R47	MF R	0.47Ω 3W J
	R1544	QRL039J-223	OM R	22kΩ 3W J
⚠	R1562	QRA14CF-6651Y	MF R	6.65kΩ 1/4W F
⚠	R1563	QRA14CF-3301Y	MF R	3.3kΩ 1/4W F
	R1581	QRE121J-683Y	C R	68kΩ 1/2W J
	R1582	QRE121J-393Y	C R	39kΩ 1/2W J
	R1584	QRE121J-223Y	C R	22kΩ 1/2W J
	R1603	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1605	NRSA02J-391X	MG R	390Ω 1/10W J
	R1607	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1609	NRSA02J-391X	MG R	390Ω 1/10W J
	R1611	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1613	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1620	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1622	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1626	NRSA02J-153X	MG R	15kΩ 1/10W J
	R1627	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1628	NRSA02J-153X	MG R	15kΩ 1/10W J
	R1629	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1631	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1635	QRE121J-271Y	C R	270Ω 1/2W J
	R1636	QRE121J-271Y	C R	270Ω 1/2W J
	R1651	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1652	NRSA02J-392X	MG R	3.9kΩ 1/10W J
	R1653	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1654	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1655	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1656	NRVA02D-152X	MF R	1.5kΩ 1/10W D
	R1658	NRVA02D-153X	MF R	15kΩ 1/10W D
	R1660	NRSA02J-512X	MG R	5.1kΩ 1/10W J
	R1669	NRSA02J-471X	MG R	470Ω 1/10W J
	R1670	NRSA02J-471X	MG R	470Ω 1/10W J
	R1671	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1672	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1673	NRSA02J-823X	MG R	82kΩ 1/10W J
	R1674	NRSA02J-823X	MG R	82kΩ 1/10W J
	R1675	NRSA02J-181X	MG R	180Ω 1/10W J
	R1676	NRSA02J-181X	MG R	180Ω 1/10W J
	R1677	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1678	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1679	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1680	NRSA02J-223X	MG R	22kΩ 1/10W J

[AV-14F33/PH]

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	R1681	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1682	NRSA02J-683X	MG R	68kΩ 1/10W J
	R1685	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1686	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1687	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1688	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1691	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1692	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1701	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1702	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1703	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1704	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1705	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1706	NRSA02J-683X	MG R	68kΩ 1/10W J
	R1707	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1708	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1709	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1710	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1711	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1712	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1713	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1714	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1715	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1716	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1717	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1718	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1719	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1720	NRSA02J-683X	MG R	68kΩ 1/10W J
	R1721	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1725	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1726	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1727	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1728	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1729	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1732	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1733	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1734	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1735	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1736	NRSA02J-124X	MG R	120kΩ 1/10W J
	R1737	NRSA02J-184X	MG R	180kΩ 1/10W J
	R1738	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1739	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1740	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1741	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1742	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1743	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1744	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1745	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1747	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1748	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1749	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1750	NRSA02J-561X	MG R	560Ω 1/10W J
	R1751	NRSA02J-561X	MG R	560Ω 1/10W J
	R1752	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1753	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1754	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1755	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1756	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1757	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1758	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1759	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1765	NRSA02J-122X	MG R	1.2kΩ 1/10W J
	R1766	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1771	NRSA02J-221X	MG R	220Ω 1/10W J
	R1772	NRSA02J-221X	MG R	220Ω 1/10W J
	R1781	NRSA02J-681X	MG R	680Ω 1/10W J
	R1782	NRSA02J-681X	MG R	680Ω 1/10W J
	R1783	NRSA02J-221X	MG R	220Ω 1/10W J
	R1784	NRSA02J-221X	MG R	220Ω 1/10W J
	R1801	NRSA02J-221X	MG R	220Ω 1/10W J
	R1802	NRSA02J-221X	MG R	220Ω 1/10W J
	R1803	NRSA02J-221X	MG R	220Ω 1/10W J
	R1811	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1812	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1813	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1815	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1816	NRSA02J-103X	MG R	10kΩ 1/10W J
⚠	R1901	QRF104K-3R9	UNF R	3.9Ω 10W K
	R1902	QRL039J-393	OM R	39kΩ 3W J
	R1910	QRE121J-564Y	C R	560kΩ 1/2W J
	R1911	QRE121J-183Y	C R	18kΩ 1/2W J
	R1921	QRE121J-681Y	C R	680Ω 1/2W J
	R1922	QRM059J-R22	MP R	0.22Ω 5W J
	R1923	QRT029J-R39	MF R	0.39Ω 2W J
	R1924	QRE121J-103Y	C R	10kΩ 1/2W J
	R1925	QRE121J-102Y	C R	1kΩ 1/2W J
	R1926	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R1929	QRE121J-332Y	C R	3.3kΩ 1/2W J
	R1932	QRE121J-4R7Y	C R	4.7Ω 1/2W J
	R1942	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1943	QRE121J-152Y	C R	1.5kΩ 1/2W J
	R1944	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1945	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1946	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1947	QRE121J-470Y	C R	47Ω 1/2W J
	R1948	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1949	NRSA02J-153X	MG R	15kΩ 1/10W J
	R1950	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1951	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1952	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1959	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	R1961	QRT039J-1R2	MF R	1.2Ω 3W J
	R1964	QRE121J-272Y	C R	2.7kΩ 1/2W J
	R1965	QRE121J-473Y	C R	47kΩ 1/2W J
	R1966	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1967	QRG01GJ-681	OM R	680Ω 1W J
⚠	R1981	QRZ0057-825	C R	8.2MΩ 1W J

CAPACITOR

Symbol No.	Part No.	Part Name	Description
C1001	QETN1HM-106Z	E CAP.	10μF 50V M
C1007	QETN1CM-477Z	E CAP.	470μF 16V M
C1008	QETN1EM-476Z	E CAP.	47μF 25V M
C1009	QETN1EM-476Z	E CAP.	47μF 25V M
C1011	NCB21HK-103X	C CAP.	0.01μF 50V K
C1101	NCB21HK-103X	C CAP.	0.01μF 50V K
C1102	NCB21HK-103X	C CAP.	0.01μF 50V K
C1103	NDC21HJ-680X	C CAP.	68pF 50V J
C1104	NCB21HK-103X	C CAP.	0.01μF 50V K
C1105	NCB21HK-103X	C CAP.	0.01μF 50V K
C1111	QETN1EM-476Z	E CAP.	47μF 25V M
C1112	NCB21HK-103X	C CAP.	0.01μF 50V K
C1113	NCB21HK-103X	C CAP.	0.01μF 50V K
C1114	NCB21HK-103X	C CAP.	0.01μF 50V K
C1116	QFV71HJ-224Z	MF CAP.	0.22μF 50V J
C1117	QETN1EM-476Z	E CAP.	47μF 25V M
C1118	NCB21HK-103X	C CAP.	0.01μF 50V K
C1119	NDC21HJ-681X	C CAP.	680pF 50V J
C1120	QETN1HM-225Z	E CAP.	2.2μF 50V M
C1123	NCB21HK-103X	C CAP.	0.01μF 50V K
C1124	NCB21HK-103X	C CAP.	0.01μF 50V K
C1161	QETN1HM-106Z	E CAP.	10μF 50V M
C1163	NDC21HJ-470X	C CAP.	47pF 50V J
C1164	NDC21HJ-470X	C CAP.	47pF 50V J
C1165	NCB21HK-103X	C CAP.	0.01μF 50V K
C1166	NCB21HK-103X	C CAP.	0.01μF 50V K
C1202	QETN1CM-107Z	E CAP.	100μF 16V M
C1207	NCB21HK-104X	C CAP.	0.1μF 50V K
C1208	QETN1HM-475Z	E CAP.	4.7μF 50V M
C1209	QETN1CM-227Z	E CAP.	220μF 16V M
C1210	NCB21HK-103X	C CAP.	0.01μF 50V K
C1211	NDC21HJ-681X	C CAP.	680pF 50V J
C1212	NCB21HK-104X	C CAP.	0.1μF 50V K
C1213	QETN1HM-105Z	E CAP.	1μF 50V M
C1214	NCB21HK-104X	C CAP.	0.1μF 50V K
C1215	QETN1HM-106Z	E CAP.	10μF 50V M
C1251	QENC1HM-106Z	BP E CAP.	10μF 50V M
C1252	QETN1HM-106Z	E CAP.	10μF 50V M
C1254	QETN1CM-477Z	E CAP.	470μF 16V M
C1255	QETN1HM-106Z	E CAP.	10μF 50V M
C1256	QETN1CM-227Z	E CAP.	220μF 16V M

[AV-14F33/PH]

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C1291	QETN1CM-107Z	E CAP.	100µF 16V M
	C1292	QETN1CM-107Z	E CAP.	100µF 16V M
	C1294	QETN1CM-107Z	E CAP.	100µF 16V M
	C1296	QETN1CM-107Z	E CAP.	100µF 16V M
	C1301	NDC21HJ-150X	C CAP.	15pF 50V J
	C1302	NDC21HJ-150X	C CAP.	15pF 50V J
	C1303	NDC21HJ-120X	C CAP.	12pF 50V J
	C1304	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1305	NDC21HJ-120X	C CAP.	12pF 50V J
	C1306	QETN1EM-476Z	E CAP.	47µF 25V M
	C1307	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1308	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1309	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1311	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1312	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1313	QETN1HM-475Z	E CAP.	4.7µF 50V M
	C1342	QETN1HM-335Z	E CAP.	3.3µF 50V M
	C1354	NDC21HJ-271X	C CAP.	270pF 50V J
	C1355	NDC21HJ-271X	C CAP.	270pF 50V J
	C1356	NDC21HJ-331X	C CAP.	330pF 50V J
	C1357	QETN1CM-107Z	E CAP.	100µF 16V M
⚠	C1382	QCZ0121-102	C CAP.	1000pF 3kV Z
	C1401	QETN1HM-105Z	E CAP.	1µF 50V M
	C1402	QETN1HM-105Z	E CAP.	1µF 50V M
	C1403	QEM61EK-225Z	E CAP.	2.2µF 25V K
	C1405	QFV71HJ-104Z	MF CAP.	0.1µF 50V J
	C1406	QFLC1HJ-103Z	M CAP.	0.01µF 50V J
	C1410	QETN1VM-107Z	E CAP.	100µF 35V M
	C1411	QETN1VM-477Z	E CAP.	470µF 35V M
	C1412	QFLC2AJ-563Z	M CAP.	0.056µF 100V J
	C1413	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1414	QETN1HM-105Z	E CAP.	1µF 50V M
	C1415	QFLC1HJ-152Z	M CAP.	1500pF 50V J
	C1416	NDC21HJ-152X	C CAP.	1500pF 50V J
	C1501	QETN1CM-107Z	E CAP.	100µF 16V M
	C1503	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1505	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1506	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1507	QETN1HM-105Z	E CAP.	1µF 50V M
	C1511	QETN1HM-106Z	E CAP.	10µF 50V M
	C1521	QCB32HK-151Z	C CAP.	150pF 500V K
	C1522	QCB32HK-331Z	C CAP.	330pF 500V K
	C1523	QETN2CM-105Z	E CAP.	1µF 160V M
⚠	C1524	QFZ0198-582	MPP CAP.	0.0058µF 1.5kVH±3%
⚠	C1525	QFZ0119-624	MPP CAP.	0.62µF 200V±3%
⚠	C1526	QEZ0203-476	E CAP.	47µF 160V M
	C1541	QETN2EM-106Z	E CAP.	10µF 250V M
	C1543	QETN1VM-477Z	E CAP.	470µF 35V M
	C1546	QETN1CM-227Z	E CAP.	220µF 16V M
	C1547	QETN1CM-227Z	E CAP.	220µF 16V M
	C1561	QETN1VM-107Z	E CAP.	100µF 35V M
	C1581	QFLC1HJ-473Z	M CAP.	0.047µF 50V J
	C1583	QFV71HJ-104Z	MF CAP.	0.1µF 50V J
	C1584	QFLC2AJ-104Z	M CAP.	0.1µF 100V J
	C1603	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	C1604	QENC1HM-474Z	E CAP.	0.47µF 50V M
	C1606	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	C1607	QENC1HM-474Z	E CAP.	0.47µF 50V M
	C1609	QETN1CM-107Z	E CAP.	100µF 16V M
	C1613	QETN1CM-108Z	E CAP.	1000µF 16V M
	C1615	QETN1CM-477Z	E CAP.	470µF 16V M
	C1617	QETN1CM-477Z	E CAP.	470µF 16V M
	C1622	QETN1HM-105Z	E CAP.	1µF 50V M
	C1623	QENC1HM-474Z	E CAP.	0.47µF 50V M
	C1624	QENC1HM-474Z	E CAP.	0.47µF 50V M
	C1631	QETN1EM-477Z	E CAP.	470µF 25V M
	C1637	NCB21HK-332X	C CAP.	3300pF 50V K
	C1638	NCB21HK-332X	C CAP.	3300pF 50V K
	C1651	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1652	QETN1CM-107Z	E CAP.	100µF 16V M
	C1653	QETN1EM-476Z	E CAP.	47µF 25V M
	C1654	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1655	QENC1HM-475Z	E CAP.	4.7µF 50V M
	C1656	QENC1HM-105Z	E CAP.	1µF 50V M
	C1657	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1658	NCB21HK-473X	C CAP.	0.047µF 50V K
	C1659	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1660	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1661	NCB21HK-104X	C CAP.	0.1µF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C1662	QBTC1CK-335Z	TAN.CAP.	3.3µF 16V K
	C1663	QETN1HM-105Z	E CAP.	1µF 50V M
	C1664	QBTC1CK-106Z	TAN.CAP.	10µF 16V K
	C1665	QETN1HM-105Z	E CAP.	1µF 50V M
	C1666	QETN1HM-105Z	E CAP.	1µF 50V M
	C1667	QETN1HM-336Z	E CAP.	33µF 50V M
	C1668	QETN1HM-105Z	E CAP.	1µF 50V M
	C1671	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1672	NCB21HK-222X	C CAP.	2200pF 50V K
	C1673	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1674	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1675	NCB21HK-222X	C CAP.	2200pF 50V K
	C1676	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1677	NCB21HK-223X	C CAP.	0.022µF 50V K
	C1679	QETN1HM-105Z	E CAP.	1µF 50V M
	C1682	QETN1HM-475Z	E CAP.	4.7µF 50V M
	C1683	QETN1HM-475Z	E CAP.	4.7µF 50V M
	C1684	QETN1HM-106Z	E CAP.	10µF 50V M
	C1685	QETN1HM-106Z	E CAP.	10µF 50V M
	C1686	QETN1HM-106Z	E CAP.	10µF 50V M
	C1691	QETN1HM-106Z	E CAP.	10µF 50V M
	C1692	QETN1HM-106Z	E CAP.	10µF 50V M
	C1693	NCB21HK-332X	C CAP.	3300pF 50V K
	C1694	NCB21HK-332X	C CAP.	3300pF 50V K
	C1701	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	C1703	NRSA02J-0ROX	MG R	0.0Ω 1/10W J
	C1706	QETN1AM-227Z	E CAP.	220µF 10V M
	C1707	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1708	QETN1HM-106Z	E CAP.	10µF 50V M
	C1711	NDC21HJ-151X	C CAP.	150pF 50V J
	C1712	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1713	QETN1HM-105Z	E CAP.	1µF 50V M
	C1714	NDC21HJ-221X	C CAP.	220pF 50V J
	C1715	NCB21HK-102X	C CAP.	1000pF 50V K
	C1716	QENC1HM-474Z	E CAP.	0.47µF 50V M
	C1717	NDC21HJ-180X	C CAP.	18pF 50V J
	C1718	NDC21HJ-220X	C CAP.	22pF 50V J
	C1719	QETN1CM-107Z	E CAP.	100µF 16V M
	C1720	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1723	NDC21HJ-151X	C CAP.	150pF 50V J
	C1724	QETN1HM-105Z	E CAP.	1µF 50V M
	C1725	NDC21HJ-151X	C CAP.	150pF 50V J
	C1727	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1733	QETN1EM-476Z	E CAP.	47µF 25V M
	C1734	NCB21HK-104X	C CAP.	0.1µF 50V K
	C1735	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1736	QETN1CM-107Z	E CAP.	100µF 16V M
	C1738	QETN1EM-476Z	E CAP.	47µF 25V M
	C1742	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1765	NDC21HJ-101X	C CAP.	100pF 50V J
	C1771	QETN1EM-476Z	E CAP.	47µF 25V M
	C1772	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1805	QETN1CM-227Z	E CAP.	220µF 16V M
	C1806	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1811	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1812	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1813	NCB21HK-103X	C CAP.	0.01µF 50V K
⚠	C1901	QFZ9040-104	MF CAP.	0.1µFAC275V M
⚠	C1902	QFZ9040-104	MF CAP.	0.1µFAC275V M
⚠	C1903	QCZ9078-472	C CAP.	4700pFAC250V M
⚠	C1904	QCZ9078-472	C CAP.	4700pFAC250V M
⚠	C1905	QCZ9078-472	C CAP.	4700pFAC250V M
⚠	C1906	QEZ0199-127	E CAP.	120µF 400V M
	C1921	QCZ0325-102	C CAP.	1000pF 2kV K
	C1922	QCS31HJ-471Z	C CAP.	470pF 50V J
	C1924	QETN1VM-107Z	E CAP.	100µF 35V M
	C1925	QFLC1HJ-102Z	M CAP.	1000pF 50V J
	C1926	QFLC1HJ-182Z	M CAP.	1800pF 50V J
	C1928	QFV71HJ-104Z	MF CAP.	0.1µF 50V J
	C1931	QCZ0122-391	C CAP.	390pF 2kV K
	C1941	QCZ0122-471	C CAP.	470pF 2kV K
⚠	C1942	QEZ0203-107	E CAP.	100µF 160V M
	C1943	QCB32HK-471Z	C CAP.	470pF 500V K
	C1944	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1945	QETN1EM-227Z	E CAP.	220µF 25V M
	C1946	QETN1EM-107Z	E CAP.	100µF 25V M
	C1947	QETN1HM-106Z	E CAP.	10µF 50V M
	C1952	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1953	QCZ0122-471	C CAP.	470pF 2kV K
	C1957	NDC21HJ-471X	C CAP.	470pF 50V J

[AV-14F33/PH]

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C1961	QETN1CM-107Z	E CAP.	100µF 16V M
	C1962	QETN1EM-476Z	E CAP.	47µF 25V M
⚠	C1981	QCZ9079-471	C CAP.	470pFAC250V K
⚠	C1982	QCZ9079-102	C CAP.	1000pFAC250V M
⚠	C1983	QCZ9079-471	C CAP.	470pFAC250V K
	C1984	QETN1VM-337Z	E CAP.	330µF 35V M
	TRANSFORMER			
	T1111	CELT001-209J3	CW TRANSF	or CELT001-209J2
	T1521	CE42034-001	HOR DRIVE TRANS	
⚠	T1522	QQH0044-001-KD	FBT	
⚠	T1921	CETS109-001JK	SW TRANSF.	
	COIL			
	L1001	QQL03BJ-150Z	COIL	15µH J
	L1003	QQL03BJ-4R7Z	COIL	4.7µH J
	L1101	QQLZ014-R22	INDUCTOR	
	L1131	QQL03BJ-150Z	COIL	15µH J
	L1161	QQL03BJ-220Z	COIL	22µH J
	L1205	QQL03BJ-4R7Z	COIL	4.7µH J
	L1301	QQL03BJ-390Z	COIL	39µH J
	L1381	QQL03BJ-390Z	COIL	39µH J
	L1501	QQL03BJ-4R7Z	COIL	4.7µH J
	L1581	QQLZ034-640	INDUCTOR	
	L1701	QQL03BJ-4R7Z	COIL	4.7µH J
	L1702	QQL03BJ-4R7Z	COIL	4.7µH J
	L1708	QQL03BJ-560Z	COIL	56µH J
	L1771	QQL03BJ-4R7Z	COIL	4.7µH J
	L1941	QQL26AK-820Z	COIL	82µH K
	L1942	QQL26AK-820Z	COIL	82µH K
	DIODE			
	D1001	MTZJ33A-T2	ZENER DIODE	
	D1201	1SS133-T2	SI.DIODE	
	D1202	MTZJ7.5B-T2	ZENER DIODE	
	D1251	MTZJ9.1C-T2	ZENER DIODE	
	D1253	MTZJ5.6A-T2	ZENER DIODE	
	D1254	MTZJ5.6A-T2	ZENER DIODE	
	D1255	MTZJ5.6A-T2	ZENER DIODE	
	D1256	MTZJ5.6A-T2	ZENER DIODE	
	D1257	MTZJ9.1C-T2	ZENER DIODE	
	D1341	1SS133-T2	SI.DIODE	
	D1401	1N4003-T2	SI.DIODE	
	D1402	MTZJ75-T2	ZENER DIODE	
	D1510	1SS133-T2	SI.DIODE	
	D1541	RH1S-T3	SI.DIODE	
	D1542	RGP10J-5025-T3	SI.DIODE	
	D1543	RGP10J-5025-T3	SI.DIODE	
	D1544	RH1S-T3	SI.DIODE	
	D1561	1SS81-T2	SI.DIODE	
⚠	D1562	MTZJ7.5S-T2	ZENER DIODE	
	D1581	RGP10J-5025-T3	SI.DIODE	
	D1582	MTZJ9.1B-T2	ZENER DIODE	
	D1631	1SS133-T2	SI.DIODE	
	D1632	1SS133-T2	SI.DIODE	
	D1633	1SS133-T2	SI.DIODE	
	D1634	1SS133-T2	SI.DIODE	
	D1656	MTZJ9.1C-T2	ZENER DIODE	
	D1657	MTZJ9.1C-T2	ZENER DIODE	
	D1691	MTZJ9.1C-T2	ZENER DIODE	
	D1692	MTZJ9.1C-T2	ZENER DIODE	
	D1701	1SS133-T2	SI.DIODE	
	D1702	1SS133-T2	SI.DIODE	
	D1704	1SS133-T2	SI.DIODE	
	D1705	MTZJ5.6A-T2	ZENER DIODE	
	D1706	SLR-342VR-T16	LED	
	D1707	SLR-342DU-T16	LED	
	D1771	MTZJ6.2B-T2	ZENER DIODE	
	D1772	MTZJ6.2B-T2	ZENER DIODE	
	D1801	MTZJ15B-T2	ZENER DIODE	
	D1802	MTZJ15B-T2	ZENER DIODE	
	D1803	MTZJ15B-T2	ZENER DIODE	
	D1805	MTZJ15B-T2	ZENER DIODE	
⚠	D1901	D2SBA60	BRIDGE DIODE	
	D1903	RGP10J-5025-T3	SI.DIODE	
	D1905	MTZJ6.8A-T2	ZENER DIODE	

⚠	Symbol No.	Part No.	Part Name	Description
	DIODE			
	D1921	RGP10J-5025-T3	SI.DIODE	
	D1922	RGP10J-5025-T3	SI.DIODE	
	D1923	MTZJ15A-T2	ZENER DIODE	
	D1924	1SS133-T2	SI.DIODE	
	D1927	1SS133-T2	SI.DIODE	
	D1928	1SS133-T2	SI.DIODE	
	D1929	MTZJ15A-T2	ZENER DIODE	
	D1941	RU3AM-LFC4	SI.DIODE	
	D1942	RGP10J-5025-T3	SI.DIODE	
	D1943	1SS133-T2	SI.DIODE	
	D1945	MTZJ5.6B-T2	ZENER DIODE	
	D1948	RGP10J-5025-T3	SI.DIODE	
	D1961	MTZJ7.5S-T2	ZENER DIODE	
	D1962	1SS133-T2	SI.DIODE	
	TRANSISTOR			
	Q1101	2SC5083/L-P/-T	SI.TRANSISTOR	
	Q1111	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1131	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1161	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1201	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1202	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1251	2SC1740S/QR/-T	SI.TRANSISTOR	
	Q1301	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1302	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1341	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1342	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1351	2SC4722/NP/	SI.TRANSISTOR	
	Q1352	2SC4722/NP/	SI.TRANSISTOR	
	Q1353	2SC4722/NP/	SI.TRANSISTOR	
	Q1401	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1511	2SC2785/JH/-T	SI TRANSISTOR	
	Q1521	BSN304-T	MOS FET	
⚠	Q1522	2SD1876-YD	POWER TRANSISTOR	H.OUT
	Q1601	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1603	DTC323TK-X	DIGI.TRANSISTOR	
	Q1604	DTC323TK-X	DIGI.TRANSISTOR	
	Q1605	DTC323TK-X	DIGI.TRANSISTOR	
	Q1631	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1651	DTC323TK-X	DIGI.TRANSISTOR	
	Q1652	DTC323TK-X	DIGI.TRANSISTOR	
	Q1653	DTC323TK-X	DIGI.TRANSISTOR	
	Q1654	DTC323TK-X	DIGI.TRANSISTOR	
	Q1701	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1702	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1703	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1705	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1761	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1921	2SA933AS/QR/-T	SI.TRANSISTOR	
	Q1941	2SA966/OY/-T	SI.TRANSISTOR	
	Q1942	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1943	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1944	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1961	2SA949/Y/Z1-T	SI.TRANSISTOR	
	IC			
	IC1001	AN78L05-T	I C	
	IC1101	M52342SP	I C	
	IC1201	TB1230AN	I C	
	IC1251	BA7612N	I C	
	IC1291	AN78N05	I C	
	IC1292	AN78L09-T	I C	
	IC1293	KIA78L05BP-T	I C	
⚠	IC1401	LA7840	I C	
	IC1541	AN7809F	I C	
⚠	IC1601	LA4485	I C	
	IC1651	UPC1851BCU	I C	
	IC1701	M37272MAH-505SP	I C(MCU)	
	IC1702	L78LR05E-MA	I C	
	IC1703	GP1U281Q	IR DETECT UNIT	
	IC1704	AT24C02-14F33PH	I C	(SERVICE)
⚠	IC1921	STR-F6654	I C(HYBRID)	
⚠	IC1941	SE135N	I C	

[AV-14F33/PH]

⚠	Symbol No.	Part No.	Part Name	Description
	OTHERS			
		LC30114-001C-H	LED HOLDER	
	CF1001	QAX0349-001	C TRAP	
	CF1131	QAX0639-001Z	C TRAP	
	CF1161	QAX0642-001Z	C FILTER	
⚠	CP1941	ICP-N75-Y	I.C.PROTECT	
⚠	CP1942	ICP-N50-Y	I.C.PROTECT	
	EF1301	CE42142-222Z	EMI FILTER	
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A
	FC1901	CEMG002-001Z	FUSE CLIP	
	FC1902	CEMG002-001Z	FUSE CLIP	
⚠	FR1542	QRZ9023-1R0	F R	1.0 Ω 2W J
⚠	FR1561	QRZ9017-4R7	F R	4.7 Ω 1/4W J
⚠	FR1586	QRE121J-472Y	C R	4.7kΩ 1/2W J
⚠	FR1621	QRZ9023-4R7	FUSI RESISTOR	4.7 Ω 2W J
⚠	FR1720	QRZ9017-270	F R	27 Ω 1/4W J
	J1001	QNN0349-001	PIN JACK	
	J1002	QNN0349-001	PIN JACK	
	J1003	CEMN065-001	PIN JACK	or QNN0281-003
	J1004	CEMN065-002	PIN JACK	or QNN0281-002
	J1005	CEMN072-003	PIN JACK	or QNN0282-001
	J1006	QMS3007-C01	3.5 JACK	
	K1401	QQR0621-001Z	FERRITE BEADS	
	K1921	QQR0621-001Z	FERRITE BEADS	
	K1923	QQR0582-001Z	FERRITE BEADS	
	K1941	QQR0621-001Z	FERRITE BEADS	
	K1942	QQR0582-001Z	FERRITE BEADS	
	K1943	QQR0621-001Z	FERRITE BEADS	
⚠	LF1901	QQR0673-002	LINE FILTER	
⚠	PC1921	TLP621(GR)-LF2	PHOTO COUPLER	
	S1701	QSW0619-003Z	TACT SWITCH	VOL+
	S1702	QSW0619-003Z	TACT SWITCH	VOL-
	S1703	QSW0619-003Z	TACT SWITCH	CH+
	S1704	QSW0619-003Z	TACT SWITCH	CH-
	S1705	QSW0619-003Z	TACT SWITCH	MENU
⚠	S1901	QSP4K21-C01	PUSH SWITCH	POWER SW
	SF1101	QAX0324-002	SAW FILTER	
⚠	SK1351	CE42554-001	C R T SOCKET	
⚠	TH1901	QAD0101-9R0	THERMISTOR	
	TU1001	QAU0190-002	TUNER	
⚠	VA1901	ERZV10V621CS	VARISTOR	
	X1301	QAX0305-001Z	CRYSTAL	
	X1701	QAX0468-001Z	CRYSTAL	or QAX0397-001Z

REMOTE CONTROL UNIT PARTS LIST

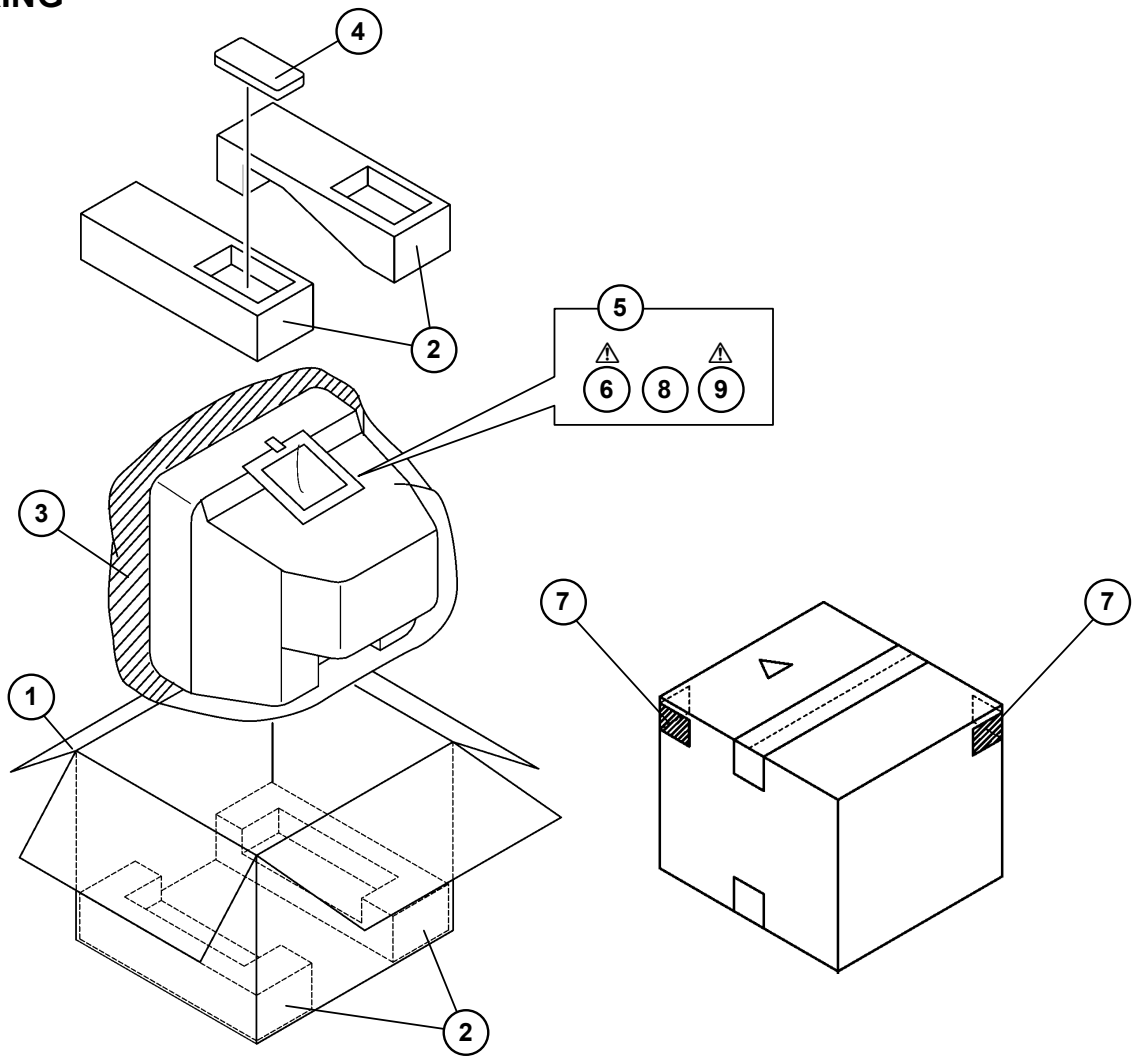
[AV-14F13/PH]

⚠	Ref.No.	Part No.	Part Name	Description
		25-1168F	BATTERY COVER	RM-C372GY-1H

[AV-14F33/PH]

⚠	Ref.No.	Part No.	Part Name	Description
		25-1168F	BATTERY COVER	RM-C373GY-1H

PACKING



PACKING PARTS LIST

[AV-14F13/PH]

⚠	Ref.No.	Part No.	Part Name	Description
	1	GG10056-079A-H	PACKING CASE	
	2	LC10833-002B-H	CUSHION ASSY	4pcs in 1set
	3	CP30967-002-H	POLY BAG	
	4	RM-C372GY-1H	REMOCON UNIT	
	5	QPA02503505P	POLY BAG	
⚠	6	LCT1205-001A-H	INST BOOK	
	7	GG20025-001A-H	CORNER LABEL	2pcs in 1set
	8	CEAB004-001	MATCHING UNIT	
⚠	9	CM36042-00A-H	ROD ANTENNA	

[AV-14F33/PH]

⚠	Ref.No.	Part No.	Part Name	Description
	1	GG10056-077A-H	PACKING CASE	
	2	LC10833-002B-H	CUSHION ASSY	4pcs in 1set
	3	CP30967-002-H	POLY BAG	
	4	RM-C373GY-1H	REMOCON UNIT	
	5	QPA02503505P	POLY BAG	
⚠	6	LCT1205-001A-H	INST BOOK	
	7	GG20025-001A-H	CORNER LABEL	2pcs in 1set
	8	CEAB004-001	MATCHING UNIT	
⚠	9	CM36042-00A-H	ROD ANTENNA	

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